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**PHASE II SOIL
and
GROUNDWATER INVESTIGATION**

**Time-Life Property
Grand Avenue and McClurg Court
Chicago, Illinois**

Presented To:

**Golub & Company
Chicago, Illinois**

Prepared By:

**GaiaTech Incorporated
Chicago, Illinois**

May 11, 2000

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EXECUTIVE SUMMARY

Golub & Company (Golub) retained GaiaTech Incorporated (GaiaTech) to complete a Phase II soil and groundwater investigation of the Time-life Property located at Grand Avenue and McClurg Court (the site) in Chicago, Illinois. The investigation was conducted to assess historic use of the property and its potential soil and groundwater contamination at the site. The subject site was used as a chemical company laboratory and offices and subsequently used as a parking lot after the demolition of the onsite buildings. The site is currently vacant. The scope of work was prepared in accordance to GaiaTech's *Phase II Investigation Proposal* dated March 16, 2000.

Based the conclusions of the recently completed *Phase I Site Investigation*, GaiaTech determined that there were three (3) areas of concern.

- **On-Site Fill Materials:** Previous reports and historical information indicate that fill materials containing cinders and ash comprising a significant portion of the site area are present. The fill materials have not been properly characterized to date to determine the appropriate procedures for disposing of the fill properly prior to development of the site.
- **Potential Radioactive Materials:** Due to the presence/former presence of radioactive materials at two sites to the south of the property, there is a potential for radioactive fill materials to exist at the site.
- **Historical Industrial Use:** Given the industrial nature of the previous operations at the site and the significant length of time of operation, there is a potential for subsurface impacts to be present from spills or releases that may have occurred. In addition, a former leaking underground storage tank site was located northwest of the subject site.

A complete soil and groundwater investigation was conducted at the property to assess the areas of concern detailed above. Additionally, GaiaTech conducted a limited radiological screening of the soils encountered in each soil boring. Based on the results of the Phase II investigation, GaiaTech concludes the following:

- Fill material was encountered at every soil boring location with a thickness of between 7 and 10 feet. Boring refusal occurred at 7.5 feet bgs at locations where the boring was placed within the former building location.
- The total concentrations of SVOCs detected at soil boring GP-13 is summed to be 5,032 mg/kg, exceeding the default value of soil saturation limit (2,000 mg/kg). Thus, remediation will be required to clean up the contamination; however, its extent is not fully delineated.
- Several detected PNAs (except for those described for areas near GP-13) and metals exceed the residential soil ingestion cleanup objectives at numerous locations across the site.

Should the site be entered into the Illinois Site Remediation Program, it appears that the exceedances can be effectively managed with institutional controls and no remediation would likely be necessary. However, due to the widespread presence of impacted soils, any fill materials excavated during construction activities that cannot be re-used on the property will need to be removed and landfilled. For future disposal of the soils, it appears that the fill materials would be classified as special waste, due to the analytical results and pH testing.

- Groundwater samples were found to contain slightly elevated levels of lead, manganese and nickel. Due to the low exceedances and the established City of Chicago groundwater use restriction, GaiaTech believes no remediation will be necessary for the on site groundwater. Additionally, conversations with IEPA representatives confirm that no remediation would be necessary. They stated that low-level metal concentrations in groundwater are not a serious issue and can be effectively managed under TACO Part 742 sections 1015 and/or 320.
- Suspect radioactive materials observed at the western portion of the property will be fully assessed with the completion of the complete site radiological survey conducted by B. Koh and Associates. Conclusions regarding this material will be included separately in this report.

1.0 INTRODUCTION

Golub & Company retained GaiaTech to conduct a focused Phase II investigation of the subsurface soil and groundwater at a vacant Time-Life property site, located near Ohio/Grand Street and McClurg Court in Chicago, Illinois (Figure 1). This Phase II investigation was conducted following a Phase I Environmental Site Assessment (ESA) recently completed by GaiaTech. The Phase II investigation was conducted to evaluate the potential for past operations at the site to effect the subsurface soil and groundwater. The scope of work was prepared in accordance to GaiaTech's Phase II Investigation Proposal dated March 16, 2000. A description of the purpose, methodology and results of this evaluation are provided below.

1.1 Background

The 2.2-acre site is currently an inactive parking lot located at Ohio, Grand and McClurg in Chicago, Illinois. The site is zoned for Commercial Manufacturing and is completely paved with no existing structures.

Historically, the site was a part of Lake Michigan until the late 1800s. In 1891, the site was filled and remained unoccupied. In 1908, several stockpiles of old lumber occupied the southeastern portion of the site. Between 1914 and 1948, three buildings were constructed on the site. In 1914, the Chicago Title and Trust Company building (333 East Ohio-also known as 341 East Ohio) was constructed on the northern portion of the site and was used to house numerous supply and wholesale distributors. In 1916, two buildings (351 East Ohio Street) were constructed in the northeastern portion of the site and housed shipping and receiving operations for several corporations. Other operations at 351 East Ohio in 1917 included the Podbielniak Incorporated experimental lab, manufacturing, and a machine shop. In the late 1920s and early 1930s, the 351 East Ohio building housed several printing and lithography operations and a waxed paper manufacturer. In 1948, Velsicol Chemical Corporation (Velsicol) constructed a building (330 East Grand) on the southern portion of the property for office and laboratory use. Previous reports indicate that Velsicol operated all of the site buildings as their corporate headquarters and as research and development laboratories for herbicides, insecticides, and plant growth regulators from 1947 to 1986. In 1986, Velsicol sold its business to Sandoz Crop Protection Corporation (Sandoz). Sandoz maintained operations similar to those of Velsicol until November 1988 when the entire facility was demolished. From 1988 until the late 1990s, the site was operated by the General Parking Corporation as a parking lot.

It was reported that one solid waste management unit (SWMU) and two small wastewater treatment units (WTUs) were operated on-site until the operation of the facility was ceased in 1988. The SWMU and WTUs were classified as RCRA management units. According to a previous Visual Site Inspection Report prepared by USEPA, the three units at the site were properly closed and "No Further Remediation" was required.

Given the industrial nature of the previous operations at the site and the significant length of time of operation, there is a potential for subsurface impacts to be present from potential historic spills and/or releases. Previous soil sampling was performed in the southern and eastern portions of the site. No soil and groundwater investigations have been completed in the other areas of the site, including the former RCRA unit areas to evaluate the potential impacts from the industrial use of the site.

Additionally, the property directly south was operated as Lindsay Light II Company from 1910 to 1936. This company manufactured lantern mantels that contained thorium nitrate. In 1993-1994, the former Lindsay Light II site was listed as a CERCLA site due to elevated levels of gamma radiation associated with thorium nitrate. In 1996, the USEPA led a cleanup for radiation contamination at the Lindsay Light II site. A development complex, Grand Pier Development Project, located two blocks west of this former Lindsay Light II property, recently discovered low levels of radioactive fill materials apparently associated with the former Lindsay light company property. As a result (in early April 2000), USEPA planned a cleanup for the elevated radiation at the Grand Pier Development Project site. A detailed radiation survey is warranted to assess the potential for similar impact at the subject site.

Based on the recently completed Phase I ESA assessment, GaiaTech has determined that there were three (3) areas of concern.

- **On-Site Fill Materials:** Previous reports and historical information indicate that fill materials containing cinders and ash comprises a significant portion of the site are present. The fill materials have not been properly characterized to date to determine the appropriate procedures for disposing of the fill properly prior to development of the site.
- **Potential Radioactive Materials:** Due to the presence/former presence of radioactive materials at two sites to the south of the property, there is a potential for radioactive fill materials to exist at this property.
- **Historical Industrial Use:** Given the industrial nature of the previous operations at the site and the significant length of time of operation, there is a potential for subsurface impacts to be present from spills or releases that may have occurred. In addition, a former leaking underground storage tank site was located northwest of the subject site.

1.2 Scope of Work

To assess the historical industrial use of the property, the presence of unknown fill materials and potential radioactive materials on the property, GaiaTech completed a total of 16 soil borings on at the site.

- Three (3) soil borings were advanced to assess the former SWMU and two (2) WTUs located at three former locations on the site. Borings were advanced to a depth of 16 feet below ground surface (bgs) or until boring refusal occurred. One (1) soil sample was collected at the surface interval (less than 3 feet) and one was collected at the subsurface interval (greater than 3 feet bgs). Based on the PID readings and site observations one of the two soil samples was retained for analysis and the other was held pending the results of the first analysis. Each selected soil sample was analyzed for the full Target Compound List (TCL). Additionally, one (1) groundwater sample was obtained from each location where the groundwater table was encountered.
- Ten (10) borings were advanced along the site property boundary to assess any historic releases and to characterize the fill material at the site. All borings were advanced to a depth of 16 feet bgs or until boring refusal occurred. One soil sample was collected at the surface interval and one was collected at the subsurface interval. Based on the PID readings and site observations one of the two soil samples was retained for analysis and the other was held pending the results of the first analysis. Each selected soil sample was analyzed for the full TCL. Additionally, one groundwater sample was obtained from each side of the property to characterize the groundwater. Groundwater samples were obtained at a location where the greatest likelihood of detecting impact would occur.
- Two (2) borings were advanced on the east and west portions of the property boundary to assess any historic releases, characterize the fill material and to provide overall site coverage of the site. All borings were advanced to a depth of 16 feet bgs or until boring refusal occurred. One soil sample was collected at the surface interval and one was collected at the subsurface interval. Based on the PID readings and site observations one of the two soil samples was retained for analysis and the other was held pending the results of the first analysis. Each selected soil sample was analyzed for the full TCL. Additionally, one groundwater sample was obtained from each boring to characterize the groundwater in the interior of the site.
- One (1) boring was advance to screen the soils in an area containing the highest suspect gamma reading on the western portion of the site. No soil samples were collected at this location, but each sample interval (2 feet) was screened with a NaI (sodium iodide) 2 x 2 gamma probe.

At all boring locations every two-foot interval was screened with a Photoionization detector to find any elevated volatiles in the soil. Additionally every four-foot interval in each boring was also scanned with the gamma probe to ascertain if any areas with elevated gamma existed on the site.

1.3 Geology and Hydrogeology

Previous reports and historical information indicate that filling occurred along the lake front in the late 1800s to create land for development. The fill includes coal tar compounds from cinders and ash from Chicago Fire and other building debris.

According to the *Surficial Geology of the Chicago Region* by H.B. Willman and J.A. Lineback (1970) and Quaternary Deposits of Illinois by A.K. Hansel and W.H. Johnson (1996), the soils are part of the Henry Formation consisting of windblown or beach sands. The native subsurface soils generally consist of shallow-water near shore lake deposits consisting of medium grained sands, that may contain thin layers of silt or sandy gravel. According to the *Geologic Map of Illinois* (by Willman and others, 1967), the site is underlain by Silurian-aged limestone or dolomite bedrock.

The soils are rated as "B1" in the Illinois State Geological Survey (ISGS) publication *Potential for Contamination of Shallow Aquifers from Land Burial of Municipal Wastes* (1984). The B1 designation describes sand and gravel less than 20 feet thick over relatively impermeable till or bedrock. This system rates various geologic materials for their ability to transmit contaminants and effect subsurface aquifers under potential landfills. This designation is useful in determining the migration potential from any potential onsite contamination.

During GaiaTech's subsurface investigation, 7.5 to 16 feet of fill material (most less than eight feet) composed of silty clay, sand, bricks, concrete, cinders and metal was typically encountered. Underlying the fill material, brown fine to medium sand with a trace of gravel was encountered to the maximum depth explored (16 feet below ground surface - bgs). Several soil borings encountered refusal at 7.5 feet bgs in the locations where the former building was located. Groundwater was encountered at approximately 14 feet bgs.

Shallow groundwater flow typically mimics the surface topography and flows towards the nearest body of water. Based upon surface topography, shallow groundwater is expected to flow east and south towards Lake Michigan and the Chicago River.

2.0 SOIL SAMPLING

2.1 Methodology

Prior to field activities, GaiaTech completed a subsurface utility clearance through the Chicago DIGGER utility clearance service and the City of Chicago water department. Soil boring locations were then determined by GaiaTech based on the location of past operations at the site and to provide overall site coverage.

Each of the soil borings were completed using Geoprobe®-type soil boring techniques whereby continuous subsurface soil samples were collected using four-foot stainless steel sampling tubes lined with acetate sample liners. Each boring was advanced by hydraulically pushing (direct-push) the sampling tubes. Upon retrieval, each of the soil samples was visually inspected for logging purposes and evidence of contamination. Each soil sample was then collected into two sets of sample bags: one set to be used for field screening and one set to be used in the event the sample was retained for laboratory analysis. Soil characteristics such as soil type, color, moisture, consistency, grain size, odor and plasticity were recorded on soil boring logs. Copies of these logs are provided in Appendix A.

Upon completion of the soil boring, each of the soil samples underwent field screening for ionizable volatile organics contamination using a Mini-Rae Photoionization Detector (PID) equipped with a 10.6eV lamp, calibrated to a 100 ppm isobutylene standard. The field screening was used to provide an indicator of the potential presence of VOCs to aid in the selection of samples for laboratory analysis. Specific PID field screening procedures were as follows:

- Soil samples were placed in sample bags.
- The soil boring number and sample depth was written on the sample bag.
- The sample was allowed to warm up.
- The PID was utilized to draw the headspace from above the soil-air interface.
- The maximum PID reading was recorded on the respective soil boring log.

Typically, the one (1) soil sample from each boring in which field screening suggested the greatest impact was retained for analysis. If field screening did not suggest impact, the one soil sample collected from directly above the interval in which perched water was encountered was retained for analysis.

Upon completion of soil boring and sampling activities, all down-hole soil boring and non-dedicated sampling equipment was decontaminated through an Alconox/water wash and scrubbing followed by a distilled water rinse between uses to avoid cross contamination. Once the last soil sample was retrieved, the boreholes were back-filled with bentonite chips with the surface repaired to its original condition. Photographs of the site activities are included in Appendix B.

A total of 15 subsurface soil samples were collected and analyzed. In accordance with IEPA VOC sample collection requirements, each of the retained soil samples was also collected into dedicated sample cores for sample preservation. The samples were then secured in a sample cooler and preserved with ice. Under strict sample chain-of-custody procedures, the samples were delivered to the First Environmental Laboratories located in Naperville, Illinois. Each of the soil samples was analyzed for the full Target Compound List (TCL).

One sample was also collected at GP-10 for analysis of physical parameters including hydraulic conductivity, soil grain size distribution, moisture content, bulk density, pH, engineering classification, total organic carbon content (TOC) and specific gravity. The sample was secured and transferred under proper chain of custody procedures to Schleede Hampton and Associates in Elk Grove Village, Illinois for testing.

2.2 Locations and Descriptions

On April 4 and 5, 2000 GaiaTech was on site to complete a total of 16 soil borings. The following is a description of the location and purpose of the borings:

- Soil borings GP-1 and GP-10 were installed in the general areas of the former WTUs to a depth of 7.5 feet bgs (refusal). The purpose of these borings was to evaluate impacts to the shallow soils and groundwater from historical leaks and/or spills that may have occurred from the former operation of waste treatment units.
- Soil boring GP-9 was completed to a depth of 16 feet bgs in an area corresponding to the former SWMU area. The purpose of the boring was to evaluate the potential for impact from any spills that may have occurred in the area.
- Soil borings GP-2, GP-3, GP-4, GP-5, GP-6, GP-7, GP-8, GP-11, GP-13, GP-14, GP-15 and GP-16 were advanced to a depth of 16 feet unless refusal occurred (7.5 feet bgs). GP-2 and GP-3 were installed in the interior of the site and the remaining borings were advanced along the property boundaries. The purpose of these borings was to evaluate the potential for impact to the soil and groundwater at the site from historic operations and to provide over all site coverage.
- Soil boring GP-12 was advanced to assess the elevated gamma readings found on the western portion of the property.

Each soil sample was collected and analyzed for the full TCL list of compounds. One sample was also collected to complete physical analysis of the native soils beneath the site. The approximate locations of these borings are shown on Figure 2.

2.3 Soil Radiological Screening

An initial survey for Gamma radiation was conducted in conjunction with field activities of the soil and groundwater sampling. Each Geoprobe sample was screened for radioactivity by use of a Ludlum NaI 2 x 2 detector and probe. A background reading was collected one block north of the site with a range of 3,580 to 6,350 units. The readings obtained from most of the borings have a range from 3,940 to 6,298 units and appear to fall within the general background concentrations. However, an elevated reading of 11,800 units was recorded from the shallow soils at boring GP-9. Subsequent general screening at the ground surface in the vicinity of this boring revealed that several distinct areas have elevated gamma readings of 18,000 to 35,500 units.

To investigate the apparent elevated readings one (1) boring was conducted at the highest reading location. The boring was advanced to a depth of 12 feet bgs and each interval was screened with the probe. The highest reading occurred at 3 feet bgs with a reading of 257,195 units. Screening levels appeared to diminish quickly with depth with background levels (6,220 units) at eight (8) feet bgs. Following the detection of apparent elevated gamma readings, B. Koh Associates, Inc of Springville New York was contracted to complete a thorough radiological survey. Results of this investigation will be detailed in a later report.

3.0 Shallow Groundwater Sampling

3.1 Methodology

Upon completion of the subsurface soil boring and sampling activities, shallow groundwater samples were collected to define the condition of the groundwater beneath the site. Groundwater samples were collected through a temporary piezometer within the soil boring. A total of eight (8) shallow one-inch diameter temporary PVC wells were installed around the site. Wells were installed with soil borings GP-1, GP-2, GP-3, GP-7, GP-10, GP-11, GP-13 and GP-15.

Each piezometer was screened to intercept the groundwater table beneath the site. Each of the piezometers was developed by removing at a minimum of three to five well volumes. Development was accomplished by the use of a peristaltic pump and dedicated disposable plastic tubing. Approximately 1.3 to two (2) gallons of water were removed from each piezometer. Groundwater samples were then collected utilizing the peristaltic pump and transferred into appropriate laboratory supplied bottles. Samples were placed in an ice filled cooler and maintained under proper chain of custody procedures to First Environmental Laboratories in Naperville Illinois. Each groundwater sample was analyzed for the full TCL.

3.2 Locations and Descriptions

Each of the well points (i.e. piezometers) was installed to assess the following:

- Well points GP-7, 8, 11 and 16 were placed to determine the concentrations at each property boundary and for site coverage. Each well was set at 16 feet with a 5-foot well screen. Water was encountered at approximately 14 feet bgs.
- Well point GP-2 and GP-3 were placed for site coverage. Both wells were set at 16 feet with a 5-foot well screen. Water was encountered at approximately 14 feet bgs.
- Well point GP-1 and GP-10 were placed to determine the concentrations near the former WTUs. Both wells were set at 16 feet with a 5-foot well screen. Water was encountered at approximately 14 feet bgs.
- Well point GP-9 was placed to determine the concentrations near the former waste storage area (SWMU). The well was set at 16 feet with a 5-foot well screen. Water was encountered at approximately 14 feet bgs.

4.0 ANALYTICAL RESULTS

4.1 Soil Sample Analytical Results

The results of soil sampling indicate that no PCBs or pesticides were detected in any of the soil samples. Two VOC compounds were detected in two of the soil samples. Acetone was detected in GP-3 (6-8') at a concentration of 0.201 mg/kg and at a concentration of 0.228 mg/kg at GP-10 (6-8'). The other VOC compound (2-Butanone) was also detected in both of these samples at a concentration of 0.077 mg/kg and 0.072 mg/kg respectively. Each detected concentration was compared to the IEPA established cleanup objectives established under the Tiered Approach to Cleanup Objectives (TACO) document. All of the detected concentrations are below all established cleanup levels.

Several SVOC compounds were detected in most of the soil samples collected on the property. A total of 20 compounds were detected including acenaphthene, acenaphthylene, anthracene, benzo(a) pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(ghi)perylene, benzo(a)pyrene, chrysene, dibenzo(ah)anthracene, dibenzofuran, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, 2-methylnapthalene, 3 & 4 methylphenol, naphthalene, phenanthrene, phenol and pyrene. All detected concentrations were compared to the cleanup objectives established under the TACO document. Several compounds exceed the soil ingestion cleanup levels in soil samples GP-1, GP-3, GP-4, GP-5, GP-7, GP-8, GP-9, GP-10, GP-13 and GP-15. Additionally, several samples also exceed the migration to Class 1 groundwater including samples GP-1, GP-3, GP-5, GP-7, GP-8, GP-10, GP-13 and GP-15 (see classification rational in Section 4.2). A total of six of the detected compounds (acenaphthylene, benzo(ghi)perylene, dibenzofuran, 2-methylnaphthlene, 3 & 4 methylphenol and phenanthrene) do not have an established cleanup level under any exposure pathway. For a complete listing of the analytical results and comparison to the TACO standards refer to Table 1.

The total of the concentrations of SVOCs detected at boring GP-13 is summed to be 5,032 mg/kg, exceeding the default value of soil saturation limit (2,000 mg/kg). Thus, remediation must be required to clean up the contamination, however, its extent is not fully delineated.

A total of 21 metals were detected in the collected soil samples. All of the detected metals were compared to the TACO standards. Four of the 21 detected metals exceed the soil ingestion pathway for residential properties, including arsenic, beryllium, copper and lead. Elevated arsenic concentrations ranged from 16.1 mg/kg (GP-3, 6-8') to 32.8 mg/kg (GP-2, 2-3') and exceeds the established soil background concentration of 13 mg/kg. To assess the migration to groundwater pathway two of the highest concentrations of arsenic detected on the property were subjected to TCLP analysis. The TCLP analysis indicates that the concentrations are 0.003 mg/L (GP-2) and 0.125 mg/L (GP-16), with the concentration detected at GP-16 exceeding the Class 1 migration to groundwater cleanup value (0.05 mg/L).

The concentration of beryllium in most of the collected samples (GP-2, GP-3, GP-4, GP-5, GP-6, GP-7, GP-8, GP-9, GP-10, GP-11, GP-13, GP-15 and GP-16) exceeds the residential ingestion objective (0.1 mg/kg) in all detected samples. Due to this exceedance one sample with the highest concentration was selected for TCLP analysis. The analysis indicates that no beryllium was detected.

The concentration of copper (5,150 mg/kg) in one sample (GP-16, 1-3') exceeds the residential soil ingestion cleanup value (2,900 mg/kg). Due to this exceedance this sample was selected for TCLP analysis. The detected TCLP concentration (1.93 mg/L) exceeds the Class 1 migration to groundwater value (0.65 mg/L).

Several soil samples also detected lead in concentrations that exceed the residential ingestion cleanup objective (400 mg/kg). Soil samples GP-3 (1,110 mg/kg), GP-10 (519 mg/kg) and GP-13 (534 mg/kg) were found to exceed the cleanup objective. The sample (GP-3) with the highest detected concentration was selected for TCLP analysis. The results indicate that the lead concentration (0.123 mg/L) exceeds the migration to groundwater standard of 0.0075 mg/L.

Cyanide was detected in 8 of the 15 soil samples. The concentration ranged from non-detect to 1.25 mg/kg. The detected concentrations are all below the TACO cleanup objectives.

To assess the pH of the soils on the property, several samples were subjected to pH testing. Soil pH at the site ranged from 8.08 to 10.

The depth, location, analytical results, and PID screening results are summarized in Table 1. Complete laboratory analytical reports are provided in Appendix C.

4.2 Physical Soil Testing Results and Groundwater Classification

The physical analysis of GP-10 (11-12 feet bgs) indicates that typical native soils beneath the site consist of poorly sorted sands that contain a trace of gravel and silt. Thus the engineering classification is "SP". The soil has a moisture content of 4.3 %, bulk density of 128.2 pounds per cubic foot (pcf), specific gravity of 2.717, pH of 8.6, and TOC or 6,350 mg/kg. Hydraulic conductivity testing of the (14 to 16 feet bgs) sample indicate that the native sands beneath the site have a hydraulic conductivity value of 2.38×10^{-3} cm/s. The complete laboratory testing of the soils is included as Appendix D.

Groundwater is classified by the IEPA under Title 35 IAC 620, by its depth below the surface (greater than or less than 10 feet bgs). If the groundwater is found at a depth of greater than 10 feet bgs, the classification depends upon the hydraulic conductivity value (must be less than 10^4 cm/s), well yield (less than 150 gpd) and thickness of the sand unit (less than 5 feet thick) to qualify as a Class II groundwater. If any of the above criteria are

exceed the groundwater is classified as Class 1 groundwater. The groundwater beneath this site is located at a depth of 14 feet bgs with a hydraulic conductivity that is greater than 10^4 cm/s and a sand thickness of greater than 5 feet, thus the site groundwater is classified as Class 1.

4.3 Ground Water Analytical Results

A total of eight (8) water samples were collected from selected temporary well points at the site including soil borings GP-2, GP-3, GP-7, GP-8, GP-10, GP-14 and GP-15. The results of the groundwater sampling at the site indicate that no VOCs, SVOCs, PCBs, pesticides or cyanide were detected. However a total of 17 of the 23 analyzed metals were detected. Each detected concentration was compared to the established TACO cleanup values for Class 1 groundwater. The concentration of lead (0.009 mg/L) in sample GP-11 barely exceeds the Class 1 standard (0.0075 mg/L). The nickel concentration (0.257 mg/L) in sample GP-7 also exceeds the Class 1 standard (0.1 mg/L). The iron concentration (7.35 mg/L) at GP-7 exceeds the Class 1 standard of 5 mg/L. The manganese concentration (0.406 to 1.39 mg/L) in six (GP-2, GP-3, GP-7, GP-10, GP-11 and GP-14) of the eight samples exceeds the Class 1 standard of 0.15 mg/L. Additionally, the concentration of antimony (0.01 mg/L) at GP-7 exceeds the Class 1 cleanup standard (0.006 mg/L).

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the Phase II investigation, GaiaTech concludes the following:

- Fill material was encountered at every soil boring location with a thickness of between 7 and 10 feet. Boring refusal occurred at 7.5 feet bgs at locations where the boring was placed within the former building location.
- The total concentrations of SVOCs detected at soil boring GP-13 is summed to be 5,032 mg/kg, exceeding the default value of soil saturation limit (2,000 mg/kg). Thus, remediation will be required to clean up the contamination; however, its extent is not fully delineated.
- Several detected PNAs (except for those described for areas near GP-13) and metals exceed the residential soil ingestion cleanup objectives at numerous locations across the site. Should the site be entered into the Illinois Site Remediation Program, it appears that the exceedances can be effectively managed with institutional controls and no remediation would likely be necessary. However, due to the widespread presence of impacted soils, any fill materials excavated during construction activities that cannot be re-used on the property will need to be removed and landfilled. For future disposal of the soils, it appears that the fill materials would be classified as special waste, due to the analytical results and pH testing.
- Groundwater samples were found to contain slightly elevated levels of antimony, iron, lead, manganese and nickel. Due to the low exceedances and the established City of Chicago groundwater use restriction, GaiaTech believes no remediation will be necessary for the on site groundwater. Additionally, conversations with IEPA representatives confirm that no remediation would be necessary. They stated that low-level metal concentrations in groundwater are not a serious issue and can be effectively managed under TACO Part 742 sections 1015 and/or 320.
- Suspect radioactive materials observed at the western portion of the property will be fully assessed with the completion of the complete site radiological survey conducted by B. Koh and Associates. Conclusions regarding this material will be included separately in this report.

6.0 LIMITATIONS

This report is prepared for the sole benefit of Golub & Company and may not be relied upon by any other person or entity. This report and the findings shall not, in whole or in part, be distributed or transmitted to any other party, nor used by any other party, without the prior written consent of GaiaTech.

GaiaTech has conducted these professional services in accordance with current scientific principles and industrial standards of practices in the fields of environmental science and engineering on the date the work was conducted and in the same geographical area of the subject site for similar studies. GaiaTech's findings and recommendations must be considered as professional opinions based upon the limited data collected during the course of the environmental site investigation which is limited in time and scope. GaiaTech makes no warranty, express or implied.

Only a limited number of soil and groundwater samples were collected from widely spaced soil borings. The variations among these samples and results may not become evident until further investigation. In the event that more data are available, it may be necessary to re-assess the conditions of the subject site in order to revise the conclusions and recommendations contained in this report.

Independent laboratories have performed analytical laboratory analyses. GaiaTech has derived the findings and recommendations, in part, from the analytical reports. These findings are contingent upon the validity of the analytical reports.

Limited soil and groundwater samples were analyzed for specific parameters as detailed in the report. Other chemical compounds, which were not analyzed for, may exist at the site.

7.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

This Phase II Investigation Report documents the results of the Investigation completed by GaiaTech for Golub & Company at the Time-Life property located at Ohio, Grand and McClurg in Chicago, Illinois.

Performed and Prepared By:



Larry P. Bertsch
Hydrogeologist, P.G.

5/11/00

Date

Senior Technical Review and Concurrence By:



John H. Yang, C.P.G.
Principal, Hydrogeology

5/11/00

Date



QA/QC

Tables

Table 1
Soil Analytical Results

TABLE 1
Soil Analytical Results
(Detected Parameters)

Date Sampled	GP-1 1-3'	GP-2 2-3'	GP-3 6-8'	GP-4 8-10'	GP-5 2-3'	GP-6 9-10'	GP-7 1-3'	GP-8 1-3'	TACO Tier I Residential Soil Cleanup Levels				Class I	Class II
Sample ID. and Depth									Ingestion	Inhalation	Construction Worker (Ingestion)	Construction Worker (Inhalation)	Migration to Groundwater Cleanup Levels	
Sample Location	Adjacent to former waste storage area	Center of former east parking lot	Former west parking lot	North property boundary	East property boundary	East property boundary	South property boundary	South property boundary						
VOCs - 8260														
Acetone	<0.01	<0.01	0.201	<0.01	<0.01	<0.01	<0.01	<0.01	7,800	100,000	200,000	100,000	16	16
2-Butanone	<0.01	<0.01	0.077	<0.01	<0.01	<0.01	<0.01	<0.01	*	*	*	*	*	*
SVOCs - 8270														
Acenaphthene	44.3	<0.33	2.28	<0.33	6.49	<0.33	0.343	3.26	4,700	*	120,000	*	570	2,900
Acenaphthylene	<9.9	<0.33	0.358	<0.33	<0.33	<0.33	<0.33	<0.33	*	*	*	*	*	*
Anthracene	82.7	<0.33	5.46	1.26	3.84	<0.33	1.15	6.29	23,000	*	610,000	*	12,000	59,000
Benz(a)anthracene	<0.33		1.8	1.94	<0.33	0.323	0.444	15.6	0.9	*	170	*	2	8
Benz(b)fluoranthene	<0.33		2.16	2.48	<0.33	0.24	0.24	14.3	0.9	*	170	*	5	25
Benz(k)fluoranthene	30.6	<0.33	18.3	0.998	1.61	<0.33	4.74	11.4	9	*	1,700	*	49	250
Benz(o,p)Diphenyl	30.3	<0.33	5	0.514	0.444	<0.33	1.09	5.5	*	*	*	*	*	*
Benz(s)pyrene	<0.33		1.79	1.92	<0.33	0.571	0.571	15.3	0.09	*	17	*	8	82
Chrysene	72.7	0.642	11.5	1.77	2.06	<0.33	4.15	15.8	88	*	17,000	*	160	800
Dibenz(a,h)anthracene	<0.33		1.36	<0.33	<0.33	<0.33	0.59	2.75	0.09	*	17	*	2	7.6
Dibenzofuran	29.3	<0.33	2.19	<0.33	4.69	<0.33	<0.33	1.12	*	*	*	*	*	*
Fluoranthene	218	<0.33	22.5	5.39	11.8	<0.33	9.25	39	3,100	*	\$2,000	*	4,300	21,000
Fluorene	44.7	<0.33	3.37	0.333	5.48	<0.33	0.119	2.47	3,100	*	\$2,000	*	560	2,800
Indeno(1,2,3-c)pyrene	33.1	<0.33	4.69	0.617	0.569	<0.33	1.3	6.1	0.9	*	170	*	14	69
2-Methylnaphthalene	5.73	0.938	3.06	<0.33	6.41	<0.33	<0.33	0.537	*	*	*	*	*	*
3 & 4 Methylphenol	<0.33	<0.33	16.8	<0.33	<0.33	<0.33	<0.33	<0.33	*	*	*	*	*	*
Naphthalene	7.92	<0.33	8.9	<0.33	5.02	<0.33	<0.33	0.482	3,100	*	8,200	*	84	420
Phenanthrene	264	1.52	21.1	4	19.1	0.522	5.28	31.2	*	*	*	*	*	*
Phenol	<0.33	<0.33	0.935	<0.33	<0.33	<0.33	<0.33	<0.33	47,000	*	120,000	*	100	100
Pyrene	163	<0.33	28	4.35	7.98	<0.33	8.67	12.2	2,300	*	61,000	*	4,200	21,000
Target Analyte List - 23 metals														
Aluminum	6,950	5,250	4,770	9,960	9,310	7,200	4,780	4,690	*	*	*	*	*	*
Antimony	<1	2.5	4.2	1.2	<1.0	2.1	1.4	2	31	*	82	*	0.006	0.024
Arsenic	5.6	32.0	16.1	7.8	7.4	5.4	5.00	11	0.4	750	61	25,000	0.05	0.2
Barium	48.6	1,030	134	43.4	69.6	82	127	675	5,500	690,000	14,000	\$70,000	2	2
Beryllium	0.5	1.3	0.8	0.6	0.8	1.1	0.6	0.9	0.1	1,300	29	44,000	0.004	0.5
Cadmium	1.4	2.5	4.6	1.8	1.5	3	1.8	1.1	78	1,800	200	59,000	0.005	0.05
Calcium	66,600	11,500	40,400	58,700	69,300	21,200	59,100	25,800	*	*	*	*	*	*
Chromium	13.7	11.1	11.8	16.7	14.7	9.4	8.3	9.9	390	270	4,100	\$1,800	0.1	1
Cobalt	8	12.3	7.4	12.3	9.4	7.7	2.8	9.7	4,700	*	12,000	*	1	1
Copper	29.8	230	237	32.9	29.1	24.7	1.16	298	2,900	*	\$2,000	*	0.65	0.65
Iron	15,000	30,500	29,600	21,600	16,400	10,800	12000	21,400	*	*	*	*	5	5
Lead	51.4	170	1,110	19.5	39.0	32.1	233	186	400	*	400	*	0.0075	0.1
Magnesium	31,100	2,810	20,200	28,800	29,900	5,460	13,300	8,700	*	*	*	*	*	*
Manganese	346	166	371	416	666	234	702	291	3,700	69,000	9,600	\$7,700	0.15	10
Mercury	<0.05	0.91	0.62	<0.05	0.07	<0.05	0.76	0.55	23	10	61	52,000	0.002	0.01
Nickel	23.2	36.6	20.6	32	27.8	30.1	10.1	21.1	1,600	13,000	4,100	440,000	0.1	2
Potassium	1,730	823	1,000	2,520	2,110	902	501	564	*	*	*	*	*	*
Selenium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	390	*	1,000	*	0.05	0.05
Silver	<0.1	<0.1	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	390	*	1,000	*	0.05	*
Sodium	663	430	952	488	491	859	542	811	*	*	*	*	*	*
Thallium	<1	<1	<1	<1	<1	<1	<1	<1	6.3	*	160	*	0.002	0.02
Vanadium	16.5	27.9	21.2	20.3	17.1	18.1	9.2	23.4	550	*	1,400	*	0.049	*
Zinc	70.2	190	742	54	63.2	105	253.0	493	23,000	*	61,000	*	5	10
TCLP Metals														
Arsenic	NA	0.003	NA	NA	NA	NA	NA	NA					0.05	0.2
Beryllium	NA	<0.001	NA	NA	NA	NA	NA	NA					0.004	0.5
Lead	NA	NA	2.12	NA	NA	NA	NA	NA					0.0075	0.1
PCBs - 8083														
	ND	ND	ND	ND	ND	ND	ND	ND						
Pesticides	ND	ND	ND	ND	ND	ND	ND	ND						
Cyanide	0.14	0.21	<0.1	<0.1	<0.1	0.024	0.22	0.21	41,000	*	4,100	*	0.2	0.6
Field Screening														
PID	0	0	0	0	0	0	0	0						

Samples analyzed at First Environmental Laboratory in Naperville, Illinois.

Soil Cleanup Objectives adapted from Illinois Environmental Protection Agency (IEPA) Tiered Approach to Cleanup Objectives (TACO) , Section 742, Appendix H, Table B, June 1998

Soil Cleanup Objectives under TACO, Chapter 1, Class I migration to groundwater ingestion exposure route as established under Section 742, Appendix B, Table B.

** - Migration route not established for this route of exposure

NA - Not Analyzed

ND - Not Detected

* - Cleanup objective not established for this route of exposure

TABLE 1
Soil Analytical Results
(Detected Parameters)

Date Sampled	GP-9	GP-10	GP-11	GP-13	GP-14	GP-15	GP-16	TACO Tier I Residential				Class I	Class II
Sample I.D. and Depth	1-3'	6-8'	2-3'	6-7.5'	9-10'	6-8'	1-3'	Soil Cleanup Levels					
Sample Location	Near former waste storage area	Near former waste treatment unit	North property boundary	South property boundary	Western property boundary	East property boundary	North property boundary	Ingestion	Inhalation	Construction Worker (ingestion)	Construction Worker (inhalation)	Migration to Groundwater Cleanup Levels	
VOCs - 8260													
Acetone	<0.01	0.228	<0.01	<0.01	<0.01	<0.01	<0.01	7,800	100,000	200,000	100,000	16	16
2-Butanone	<0.01	0.072	<0.01	<0.01	<0.01	<0.01	<0.01	*	*	*	*	*	*
SVOCs - 8270													
Aceanaphthalene	0.543	<0.33	<0.33	115	<0.33	<0.33	<0.33	4,700	*	120,000	*	570	2,900
Aceanaphthalene	<0.33	0.333	<0.33	<3,300	<0.33	0.752	<0.33	*	*	*	*	*	*
Anthracene	0.752	1.21	<0.33	350	<0.33	1.4	<0.33	23,000	*	610,000	*	12,000	59,000
Benz(a)anthracene	0.922	<0.33	<0.33	<0.33	<0.33	5.15	<0.33	0.9	*	170	*	2	8
Benz(b)fluoranthene	0.741	<0.33	<0.33	<0.33	<0.33	4.53	<0.33	0.9	*	170	*	5	25
Benz(k)fluoranthene	0.626	4.29	<0.33	<0.33	<0.33	3.61	<0.33	9	*	1,700	*	49	250
Benz(a,h)perylene	0.376	1.16	<0.33	<0.33	<0.33	3.01	<0.33	*	*	*	*	*	*
Benz(a)pyrene	0.826	5.94	<0.33	<0.33	<0.33	5.16	<0.33	0.09	*	17	*	8	82
Chrysene	0.868	3.99	<0.33	<0.33	<0.33	4.88	<0.33	88	*	17,000	*	160	800
Dibenz(a,h)anthracene	<0.33	0.729	<0.33	<0.33	<0.33	1.11	<0.33	0.09	*	17	*	2	76
Dibenzofuran	0.393	0.409	<0.33	140	<0.33	0.154	<0.33	*	*	*	*	*	*
Fluoranthene	2.81	5.9	<0.33	954	<0.33	9.47	<0.33	0.366	3,100	*	82,000	*	21,000
Fluorene	0.174	0.477	<0.33	179	<0.33	0.151	<0.33	3,100	*	82,000	*	560	2,800
Indeno(1,2,3-cd)pyrene	0.394	1.54	<0.33	<0.33	<0.33	3.45	<0.33	0.9	*	170	*	14	69
2-Methylimidobiphenole	0.618	0.36	<0.33	47.5	<0.33	0.342	<0.33	*	*	*	*	*	*
1 & 4 Methylphenol	<0.33	0.461	<0.33	<3,300	<0.33	<0.33	<0.33	*	*	*	*	*	*
Naphthalene	0.406	0.683	<0.33	<0.33	<0.33	0.628	<0.33	3,100	*	8,200	*	84	420
Phenanthrene	3.57	3.18	<0.33	1,170	<0.33	6.24	<0.33	*	*	*	*	*	*
Phenol	<0.33	<0.33	<0.33	<3,300	<0.33	<0.33	<0.33	47,000	*	120,000	*	100	100
Pyrene	2.07	5.78	<0.33	607	<0.33	7.8	<0.33	0.382	2,300	*	61,000	*	4,200
Target Analyte List - 23													
metals	mg/kg												
Aluminum	10,200	6,130	4,920	6,780	1,380	2,690	6,580	*	*	*	*	*	*
Antimony	1.3	2.5	<1.0	2.1	<1.0	2.7	2.1	31	*	82	*	0.006	0.024
Arenic	0.8	13.2	4.1	11.7	2.2	16.6	2.7	0.4	750	61	25,000	0.05	0.2
Barium	3.7	85.1	33.4	143.0	3.8	115	46.3	5,500	690,000	14,000	\$70,000	2	2
Beryllium	0.6	0.8	0.4	0.8	<0.1	0.6	0.9	0.1	1,300	29	44,000	0.004	0.5
Cadmium	1.6	2.3	0.9	2.7	0.4	2.7	3.8	78	1,800	200	59,000	0.005	0.05
Calcium	69,700	35,100	43,300	74,400	43,500	35,800	17,600	*	*	*	*	*	*
Chromium	18.4	12	9.6	16.5	4	8.7	4.5	390	270	4,100	8,800	0.1	1
Cobalt	13.3	7.2	7	9.8	2.4	5.4	12.4	4,700	*	12,000	*	1	1
Copper	36.1	18	25.5	368	4.3	86.4	5.150	2,900	*	8,200	*	0.65	0.65
Iron	23,000	22,800	12,800	26,200	5,850	28,200	38,200	*	*	*	*	5	5
Lead	29	519	60.6	534	2.8	314	318	400	*	400	*	0.0075	0.1
Magnesium	29,700	15,200	17,700	25,000	23,300	18,300	5,870	*	*	*	*	*	*
Manganese	428	307	293	651	149	250	278	3,700	69,000	9,600	8,700	0.15	10
Mercury	<0.05	0.85	0.09	2<0.05	2.5	0.45	23	10	61	52,000	0.002	0.01	
Nickel	36.3	18.8	18.1	26.4	3.8	13.4	98.8	1,600	13,000	4,100	440,000	0.1	2
Potassium	2,560	2	960	1,180	181	672	2,020	*	*	*	*	*	*
Selenium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	190	*	1,000	*	0.05	0.05
Silver	<0.1	0.2	<0.1	0.6	<0.1	0.6	0.7	390	*	1,000	*	0.05	*
Sodium	520	684	204	599	272	672	857	*	*	*	*	*	*
Thallium	<1	<1	<1	<1	<1	<1	<1	6.3	*	160	*	0.002	0.02
Vanadium	21.9	19.4	12.2	26.3	7.6	17	21.5	550	*	1,400	*	0.049	*
Zinc	87.6	225	70.8	357	30.9	378	585	23,000	*	61,000	*	5	10
TCLP Metals	mg/L												
Arenic	NA	NA	NA	NA	NA	NA	NA	0.125	*	*	0.05	0.2	
Copper	NA	NA	NA	NA	NA	NA	NA	1.33	*	*	0.65	0.65	
PCBs - 8083	ND	ND	ND	ND	ND	ND	ND						
Pesticides	mg/kg												
Cyanide	mg/kg												
pH	10	8.08	9.3	8.83	8.96	8.49	NA						
Field Screening	ppm												
PID	0	0	0	0	0	0	0						

Samples analyzed at First Environmental Laboratory in Naperville, Illinois.

Soil Cleanup Objectives adopted from Illinois Environmental Protection Agency (IEPA) Tiered Approach to Cleanup Objectives (TACO), Section 742, Appendix B, Table B, June 1998.

Soil cleanup objectives for Tier I, Class I migration to groundwater ingestion exposure route as established under Section 742, Appendix B, Table B.

Soil areas are Grade 1 residential and background areas.

NA = Not Analyzed

ND = Not Detected

* Cleanup objective not established for this route of exposure.

Table 2
Groundwater Analytical Results

TABLE 2
Groundwater Analytical Results
(Detected Parameters)

Sample ID	GP-2	GP-3	GP-7	GP-8	GP-10	GP-11	GP-14	GP-15	Class I	Class II
Sample Location	Center of former east parking lot	Former west parking lot	South property boundary	South property boundary	Near former waste treatment unit	North property boundary	Western property boundary	East property boundary	Groundwater Cleanup Levels	
VOCs - 8260	mg/L									mg/L
All parameters	ND	ND	ND	ND	ND	ND	ND	ND	Varies	Varies
SVOCs - 8270	mg/L									mg/L
All parameters	ND	ND	ND	ND	ND	ND	ND	ND	Varies	Varies
Target Analyte List - 23 metals	mg/L									mg/L
Aluminum	<0.05	<0.05	2.29	0.15	0.11	2.12	0.48	0.24	*	*
Antimony	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.006	0.024
Arsenic	<0.001	0.004	0.002	0.004	<0.002	<0.002	0.005	<0.001	0.05	0.2
Barium	0.061	0.092	0.131	0.022	0.048	0.042	0.038	0.078	2	2
Beryllium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	0.5
Cadmium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.005	0.05
Calcium	100	226	426	99.8	463	150	215	239	*	*
Chromium	0.004	0.001	0.067	0.001	0.003	0.02	0.007	0.003	0.1	1
Cobalt	<0.001	<0.001	0.015	0.001	0.01	0.004	0.004	0.007	1	1
Copper	0.001	0.001	0.02	0.009	0.003	0.004	0.004	0.016	0.65	0.65
Iron	2.87	0.36	7.23	0.49	1.21	4.96	1.92	1.15	5	5
Lead	<0.002	<0.002	0.006	<0.002	<0.002	0.009	0.005	0.006	0.0075	0.1
Magnesium	74.6	245	45	14.5	133	60.5	48.8	193	*	*
Manganese	11.6	18.7	3.55	0.040	0.572	0.444	0.505	0.110	0.15	10
Mercury	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.002	0.01
Nickel	0.002	0.002	0.005	0.007	0.011	0.006	0.006	0.011	0.1	2
Potassium	18.4	26.9	7.3	23.7	52.8	22.1	9.6	40.8	*	*
Selenium	<0.002	<0.002	<0.002	0.019	<0.002	<0.002	0.018	0.005	0.05	0.05
Silver	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.05	*
Sodium	286	176	69.2	422	82.2	22.8	59.5	445	*	*
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.002	0.02
Vanadium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.049	*
Zinc	0.009	0.006	0.1	0.007	0.008	0.018	0.011	0.038	5	10
PCBs - 8083	mg/L									mg/L
Pesticides	ND	ND	ND	ND	ND	ND	ND	ND	0.0005	0.0025
Cyanide	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.2	0.6

Samples analyzed at First Environmental Laboratory in Naperville, Illinois

Groundwater Cleanup Objectives adapted from Illinois Environmental Protection Agency (IEPA) Tiered Approach to Cleanup Objectives (TACO), Section 742, Appendix B, Table E, June 1998

Shaded area exceeds Class I groundwater remediation objective

ND: Not Detected

* Cleanup objective not established for this route of exposure

Table 3
Physical Soil Analytical Results

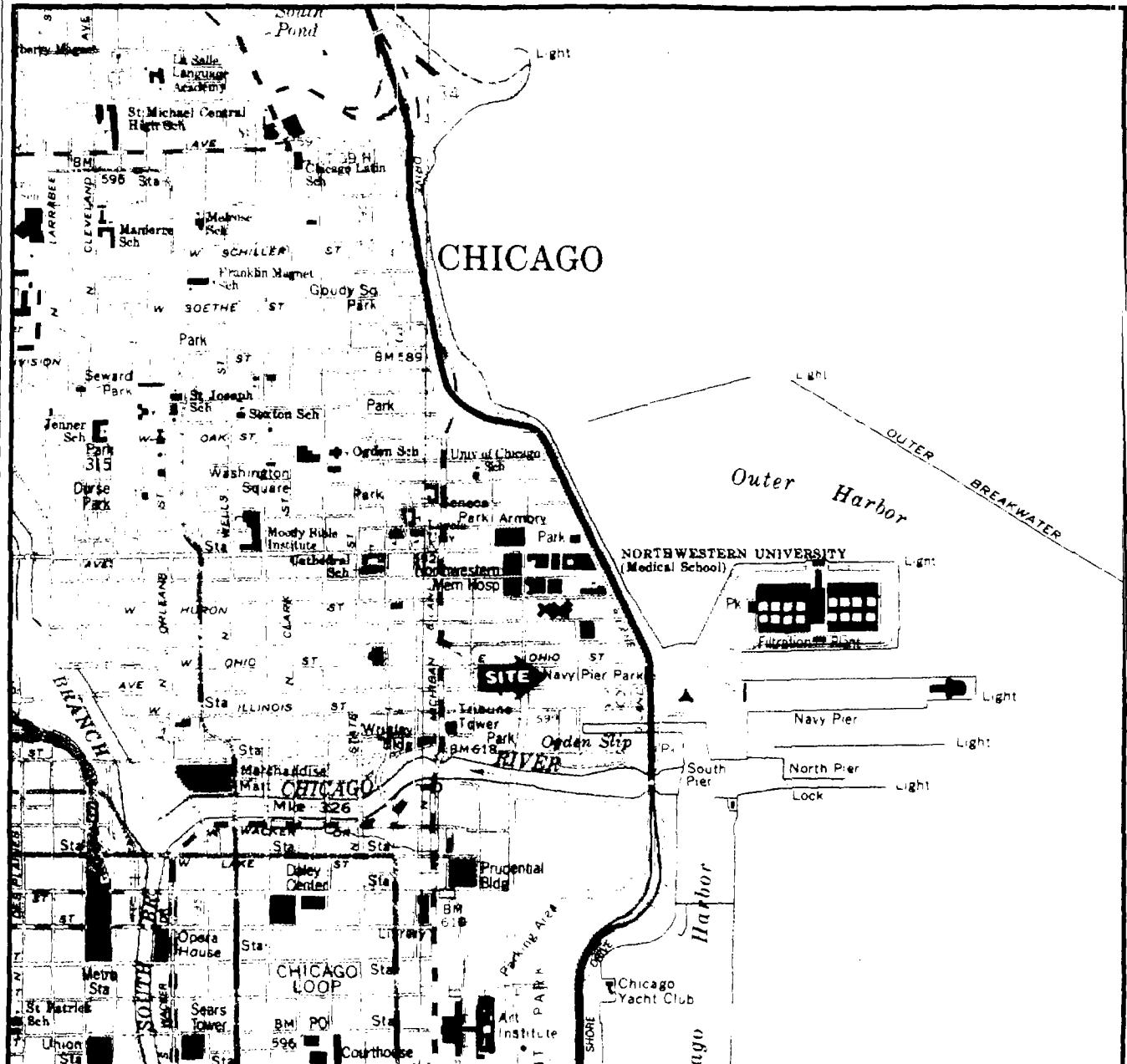
Table 3
Physical Soil Testing
Results

Time-Life Property
Chicago, Illinois

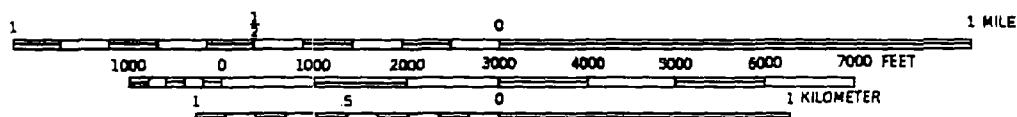
Boring No.	Depth	Moisture Content	Bulk Density	Specific Gravity	pH	Total Organic Content (mg/kg)	%	Permeability (cm/sec)
GP-10	11 to 12'	4.30%	128.2 pcf	2.717	8.6	6,350	0.6	
GP-10	14 to 16'							2.38×10^{-3}

Figures

Figure 1
Site Location Map



Scale 1: 24 000
Contour Interval 5 Feet



Site Location Map

UNITED STATES GEOLOGICAL SURVEY
CHICAGO LOOP QUADRANGLE
ILLINOIS - COOK COUNTY
7.5 MINUTE SERIES (TOPOGRAPHIC)
1993



2.2-Acre Property

Southwest Corner of Ohio Street and McClurg Court
Chicago, Illinois

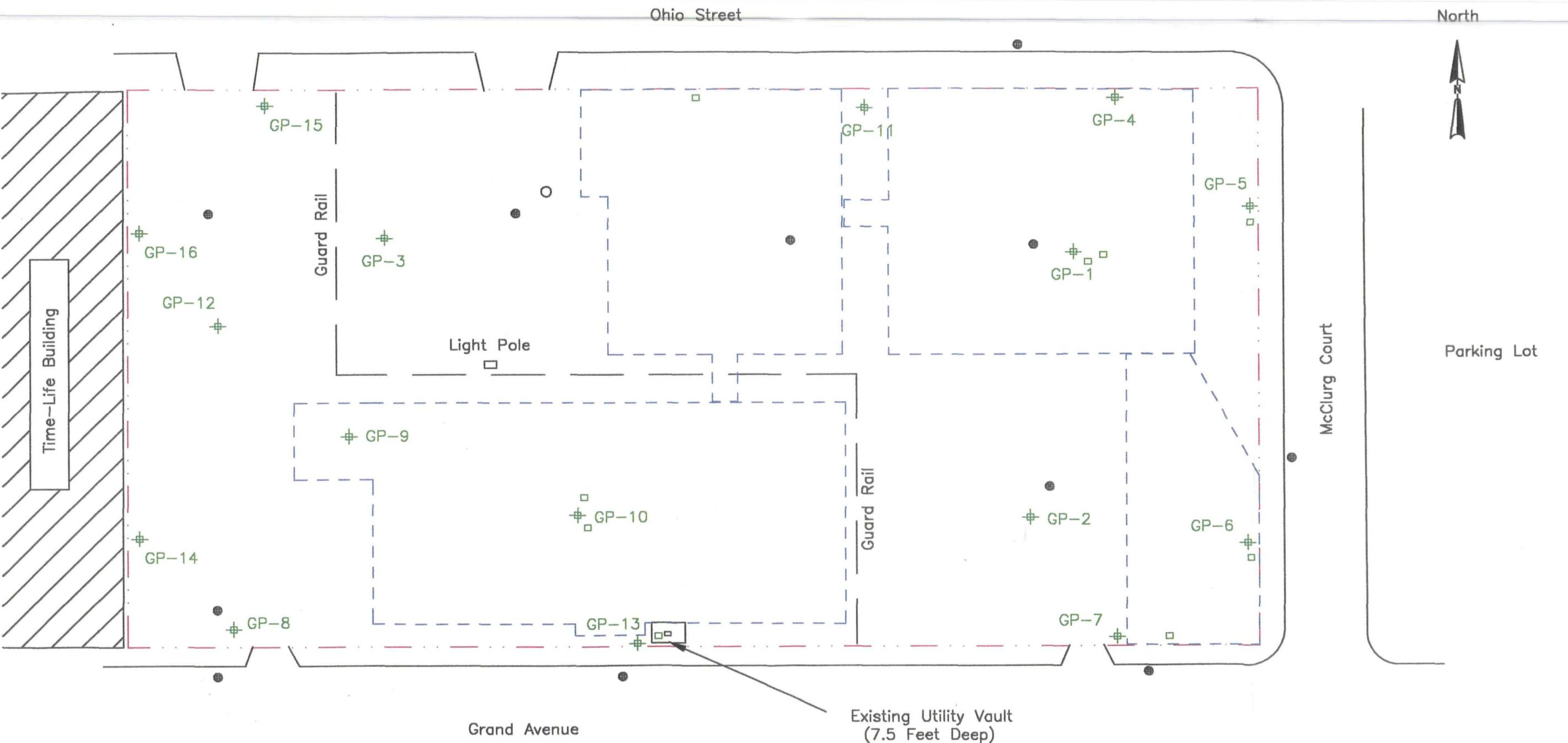


Quadrangle Location

GaiaTech INC.

Environmental Planning
for Bus. 1993

Figure 2
Site Plan with Soil Boring Locations



LEGEND

- ⊕ Soil Boring Locations
- Approximate Location of Former Property Boundaries
- - - Approximate Location of Former Buildings
- Re-Located Borings Where Refusal Occured
- Catch Basin

0 40 80 feet

Scale: 1" = 40'

GaiaTech INC
Environmental Planning for Business
One North Franklin • Suite 2508 Chicago, Illinois 60606
312.541.4200 FAX 312.541.0340

DRAWN	LB	CHECK	JY	DATE	4/00	SCALE	1" = 40'	CADD FILE NO.	49174100\Technical	FIG. NO.	2
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SITE PLAN WITH BORING LOCATIONS
TIME-LIFE PROPERTY
OHIO-GRAND-McCLERG
CHICAGO, ILLINOIS

Appendix A

Boring Logs

SOIL BORING CONSTRUCTION INFORMATION				SURVEY INFORMATION				WELL CONSTRUCTION INFORMATION			
Date/Time Started	: 4/14/2000 @ 0915			Northing Coord.	: N/A			Well Screen Type	: N/A		
Date/ Time Completed:	4/14/2000 @ 0945			Easting Coord.	: N/A			Well Screen Slot Size	: N/A		
Total Depth of Boring	: 7.5 feet bgs			Top of Casing Elev.	: N/A			Length of Well Screen	: N/A		
Total Depth of Well	: N/A			Surface Elevation	: N/A			Well Riser Type	: N/A		
Logged By	: Larry Bertsch			GW Elevation Drilling	: N/A			Length of Riser	: N/A		
Drilling Method	: Geoprobe			GW Elevation Final	: N/A			Well Diameter	: N/A		
Hole Diameter	: 2 inches			Surveyed By	: N/A			Joints	: N/A		
Drilling Company	: Soil Probe, Inc.			Date Surveyed	: N/A			Annular Seal	: N/A		
Sampling Method	: Direct Push			Benchmark Reference	: N/A			Well Completed as	: N/A		
Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION				
0							3" Asphalt.				
1				0.0							
2		4.73	0.0				SILTY CLAY, concrete, trace cinders, plastic, slight chemical odor.				
4					FL						
3			0.0								
4		5.53	0.0								
8							Refusal at 7.5 feet bgs End of Boring at 7.5 feet bgs. Soil sample submitted at 1'-3' for TCL and TAL analysis.				
12											

SOIL BORING CONSTRUCTION INFORMATION			SURVEY INFORMATION			WELL CONSTRUCTION INFORMATION				
Date/Time Started	: 4/14/2000 @ 0950		Northing Coord.	: N/A		Well Screen Type	: N/A			
Date/ Time Completed:	4/14/2000 @ 10305		Easting Coord.	: N/A		Well Screen Slot Size	: N/A			
Total Depth of Boring	: 16 feet bgs		Top of Casing Elev.	: N/A		Length of Well Screen	: N/A			
Total Depth of Well	: N/A		Surface Elevation	: N/A		Well Riser Type	: N/A			
Logged By	: Larry Bertsch		GW Elevation Drilling	: N/A		Length of Riser	: N/A			
Drilling Method	: Geoprobe		GW Elevation Final	: N/A		Well Diameter	: N/A			
Hole Diameter	: 2 inches		Surveyed By	: N/A		Joints	: N/A			
Drilling Company	: Soil Probe, Inc.		Date Surveyed	: N/A		Annular Seal	: N/A			
Sampling Method	: Direct Push		Benchmark Reference	: N/A		Well Completed as	: N/A			
Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION			
0					GP		SAND & GRAVEL, black/white/dark brown, crushed stone, clay, loose, damp, no odor.			
1				0.0			CINDERS, BRICKS & SAND, black/red/brown, loose, dry, no odor.			
2		4.73		5.8	FL					
4							CLAYEY-SANDY SILT, black, cinders, coal, organic debris, wood pieces at 6 to 7 feet bgs, organic odor.			
3				2.3						
5							FL			
4		4.75		3.0						
8							SAND, gray to light gray, well sorted, loose, dry, moist at 12 feet bgs, wet at 14.3 feet bgs, no odor.			
5				0.0						
6		4.99		0.0						
12					SP					
7				0.0						
8		4.92		0.0						
16							End of Boring at 16 feet bgs. Soil sample submitted at 2'-3' and 6'-8' for TCL and TAL analysis.			
20										
 GaiaTech Environmental Planning for Business One North Franklin • Suite 2500 • Chicago, Illinois • 60602 312.541.4200 FAX 312.541.6340										
Time-Life Property Golub & Company McClurg, Grand & Ohio Chicago, Illinois GaiaTech Project No. 4917-410-0										
LOG OF BORING GP-2										
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SOIL BORING CONSTRUCTION INFORMATION				SURVEY INFORMATION				WELL CONSTRUCTION INFORMATION			
Date/Time Started	: 4/14/2000 @ 1030	Northing Coord.	: N/A	Well Screen Type	: N/A			Well Screen Slot Size	: N/A		
Date/ Time Completed:	4/14/2000 @ 1115	Easting Coord.	: N/A	Length of Well Screen	: N/A						
Total Depth of Boring	: 16 feet bgs	Top of Casing Elev.	: N/A	Well Riser Type	: N/A			Length of Riser	: N/A		
Total Depth of Well	: N/A	Surface Elevation	: N/A	Well Diameter	: N/A						
Logged By	: Larry Bertsch	GW Elevation Drilling	: N/A	Joints	: N/A			Annular Seal	: N/A		
Drilling Method	: Geoprobe	GW Elevation Final	: N/A	Well Completed as	: N/A						
Hole Diameter	: 2 inches	Surveyed By	: N/A								
Drilling Company	: Soil Probe, Inc.	Date Surveyed	: N/A								
Sampling Method	: Direct Push	Benchmark Reference	: N/A								
Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION				
0							SAND fill, asphalt, crushed stone.				
1				0.0	FL		SAND, brick, brown/black/red, cinders, bricks, loose, dry, no odor.				
2		6.19		0.0	FL						
4							CLAYEY SILT, organic, black, little sand, trace cinder, metal, glass, bricks, moist, dark gray at 8-11 feet bgs.				
3				0.0							
4		6.7		0.0							
8					ML						
5				0.0							
6		7		0.0			SAND, light gray, fine, dry, moist at 13.5 feet bgs, wet at 14.3 feet bgs, brown sand at 12.5 to 16 feet bgs.				
12											
7				0.0	SP						
8		5.64		0.0							
16							End of Boring at 16 feet bgs. Soil sample submitted at 6'-8' for TCL and TAL analysis Groundwater sample submitted for TCL and TAL analysis.				
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SOIL BORING CONSTRUCTION INFORMATION			SURVEY INFORMATION			WELL CONSTRUCTION INFORMATION		
Date/Time Started	: 4/14/2000 @ 1215		Northing Coord.	: N/A		Well Screen Type	: N/A	
Date/ Time Completed:	4/14/2000 @ 1245		Easting Coord.	: N/A		Well Screen Slot Size	: N/A	
Total Depth of Boring	: 16 feet bgs		Top of Casing Elev.	: N/A		Length of Well Screen	: N/A	
Total Depth of Well	: N/A		Surface Elevation	: N/A		Well Riser Type	: N/A	
Logged By	: Larry Bertsch		GW Elevation Drilling	: N/A		Length of Riser	: N/A	
Drilling Method	: Geoprobe		GW Elevation Final	: N/A		Well Diameter	: N/A	
Hole Diameter	: 2 inches		Surveyed By	: N/A		Joints	: N/A	
Drilling Company	: Soil Probe, Inc.		Date Surveyed	: N/A		Annular Seal	: N/A	
Sampling Method	: Direct Push		Benchmark Reference	: N/A		Well Completed as	: N/A	
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Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION	
0							SILTY SANDY CLAY, grayish/brown, trace cinders, bricks, concrete, soft, moist, no odor.	
1				0.0				
2			5.63	0.0				
4								
3				0.0	FL			
4				6.7	0.0			
8							SAND and GRAVEL, brown, trace cinders & brick, loose, moist, no odor.	
5				0.0				
6			7	0.0				
7								
12					GP			
8			5.64	0.0			LIMESTONE fragments, light brown, loose, damp, no odor.	
16							End of Boring at 16 feet bgs. Soil sample submitted at 1'-3' and 8'-10' for TCL and TAL analysis. Groundwater sample submitted for TCL and TAL analysis.	
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SOIL BORING CONSTRUCTION INFORMATION				SURVEY INFORMATION				WELL CONSTRUCTION INFORMATION			
Date/Time Started	: 4/14/2000	Northing Coord.	: N/A	Well Screen Type	: N/A						
Date/ Time Completed:	4/14/2000	Easting Coord.	: N/A	Well Screen Slot Size	: N/A						
Total Depth of Boring	: 7.5 feet bgs	Top of Casing Elev.	: N/A	Length of Well Screen	: N/A						
Total Depth of Well	: N/A	Surface Elevation	: N/A	Well Riser Type	: N/A						
Logged By	: Larry Bertsch	GW Elevation Drilling	: N/A	Length of Riser	: N/A						
Drilling Method	: Geoprobe	GW Elevation Final	: N/A	Well Diameter	: N/A						
Hole Diameter	: 2 inches	Surveyed By	: N/A	Joints	: N/A						
Drilling Company	: Soil Probe, Inc.	Date Surveyed	: N/A	Annular Seal	: N/A						
Sampling Method	: Direct Push	Benchmark Reference	: N/A	Well Completed as	: N/A						
Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION				
0							SILTY SANDY CLAY, grayish/brown, trace gravel, cinders, wood, no odor.				
1				51.6							
2		5.88		55.8							
4						FL					
3			0.0								
4		5.73		0.0							
8							Refusal at 7.5 feet bgs End of Boring at 7.5 feet bgs.				
12											

SOIL BORING CONSTRUCTION INFORMATION				SURVEY INFORMATION				WELL CONSTRUCTION INFORMATION			
Date/Time Started	:	4/4/2000 @1415		Northing Coord.	:	N/A		Well Screen Type	:	N/A	
Date/ Time Completed:	4/4/2000			Easting Coord.	:	N/A		Well Screen Slot Size	:	N/A	
Total Depth of Boring	:	13.5 feet bgs		Top of Casing Elev.	:	N/A		Length of Well Screen	:	N/A	
Total Depth of Well	:	N/A		Surface Elevation	:	N/A		Well Riser Type	:	N/A	
Logged By	:	Larry Bertsch		GW Elevation Drilling	:	N/A		Length of Riser	:	N/A	
Drilling Method	:	Geoprobe		GW Elevation Final	:	N/A		Well Diameter	:	N/A	
Hole Diameter	:	2 inches		Surveyed By	:	N/A		Joints	:	N/A	
Drilling Company	:	Soil Probe, Inc.		Date Surveyed	:	N/A		Annular Seal	:	N/A	
Sampling Method	:	Direct Push		Benchmark Reference	:	N/A		Well Completed as	:	N/A	
Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION				
0							Asphalt, SAND, GRAVEL, little cinders, bricks.				
1			0.0		FL		SILTY CLAY, brown/gray, trace cinders, wood, soft, plastic.				
2		5.63	0.0								
4				FL							
3			0.0								
4		5.5	0.0				SAND & GRAVEL, brown, little bricks, concrete, cinders				
8				FL							
5			0.0				CINDERS, SAND & COAL, black, brown/black, loose, dry, no odor.				
6		5.63	0.0	FL							
12		4.80	0.0								
7							Refusal at 13.5 feet bgs End of Boring at 13.5 feet bgs.				
16											
20											

SOIL BORING CONSTRUCTION INFORMATION			SURVEY INFORMATION			WELL CONSTRUCTION INFORMATION		
Date/Time Started	: 4/4/2000		Northing Coord.	: N/A		Well Screen Type	: N/A	
Date/ Time Completed:	4/4/2000		Easting Coord.	: N/A		Well Screen Slot Size	: N/A	
Total Depth of Boring	: 16 feet bgs		Top of Casing Elev.	: N/A		Length of Well Screen	: N/A	
Total Depth of Well	: N/A		Surface Elevation	: N/A		Well Riser Type	: N/A	
Logged By	: Larry Bertsch		GW Elevation Drilling	: N/A		Length of Riser	: N/A	
Drilling Method	: Geoprobe		GW Elevation Final	: N/A		Well Diameter	: N/A	
Hole Diameter	: 2 inches		Surveyed By	: N/A		Joints	: N/A	
Drilling Company	: Soil Probe, Inc.		Date Surveyed	: N/A		Annular Seal	: N/A	
Sampling Method	: Direct Push		Benchmark Reference	: N/A		Well Completed as	: N/A	
Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION	
0							Asphalt, SAND, GRAVEL, bricks & crushed stone, loose, moist, no odor.	
1				0.0	FL		SAND, brown, little gravel & concrete, trace bricks & cinders, loose, moist, no odor.	
2		5.51		0.0	FL			
4								
3			0.0				ORGANIC CLAYEY SILT, black, little sand & cinders, firm, damp, organic odor.	
4								
5				5.78	0.0	FL		
8							SAND, brown, fine, loose, dry, wet at 14 feet bgs, no odor.	
6								
12						SW		
7								
8			5.18		0.0			
16							End of Boring at 16 feet bgs. Soil samples collected from 1'-3' and 6'-8' feet bgs for TCL and TAL analysis. Groundwater sample collected for TCL and TAL analysis.	
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SOIL BORING CONSTRUCTION INFORMATION			SURVEY INFORMATION			WELL CONSTRUCTION INFORMATION		
Date/Time Started	: 4/4/2000 @ 1640		Northing Coord.	: N/A		Well Screen Type	: N/A	
Date/ Time Completed:	4/4/2000 @ 1720		Easting Coord.	: N/A		Well Screen Slot Size	: N/A	
Total Depth of Boring	: 16 feet bgs		Top of Casing Elev.	: N/A		Length of Well Screen	: N/A	
Total Depth of Well	: N/A		Surface Elevation	: N/A		Well Riser Type	: N/A	
Logged By	: Larry Bertsch		GW Elevation Drilling	: N/A		Length of Riser	: N/A	
Drilling Method	: Geoprobe		GW Elevation Final	: N/A		Well Diameter	: N/A	
Hole Diameter	: 2 inches		Surveyed By	: N/A		Joints	: N/A	
Drilling Company	: Soil Probe, Inc.		Date Surveyed	: N/A		Annular Seal	: N/A	
Sampling Method	: Direct Push		Benchmark Reference	: N/A		Well Completed as	: N/A	
<hr/>								
Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION	
0								
1				0.0			4" Asphalt, CINDERS, SAND, BRICKS & GRAVEL, brown/black, trace coal, loose, moist, no odor.	
2			5.36	0.0				
4					FL			
3				0.0				
4			6.09	0.0				
8							SAND, brown, fine-medium-coarse, gravel layer at 14 to 14.4 feet bgs, wet at 14 feet bgs, loose, no odor.	
5				0.0				
6			6.03	0.0				
12					SP			
7				0.0				
8			6	0.0				
16							End of Boring at 16 feet bgs. Soil samples collected from 1'-3' and 8'-10' feet bgs for TCL and TAL analysis.	
20								

SOIL BORING CONSTRUCTION INFORMATION			SURVEY INFORMATION			WELL CONSTRUCTION INFORMATION		
Date/Time Started	4/5/2000 @ 845		Northing Coord.	: N/A		Well Screen Type	: N/A	
Date/ Time Completed:	4/5/2000		Easting Coord.	: N/A		Well Screen Slot Size	: N/A	
Total Depth of Boring	16 feet bgs		Top of Casing Elev.	: N/A		Length of Well Screen	: N/A	
Total Depth of Well	: N/A		Surface Elevation	: N/A		Well Riser Type	: N/A	
Logged By	Larry Bertsch		GW Elevation Drilling	: N/A		Length of Riser	: N/A	
Drilling Method	Geoprobe		GW Elevation Final	: N/A		Well Diameter	: N/A	
Hole Diameter	2 inches		Surveyed By	: N/A		Joints	: N/A	
Drilling Company	Soil Probe, Inc.		Date Surveyed	: N/A		Annular Seal	: N/A	
Sampling Method	Direct Push		Benchmark Reference	: N/A		Well Completed as	: N/A	
Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION	
0							4" asphalt, SAND & BROKEN CONCRETE, no odor.	
1			0.0	FL			SAND, brown, fine to medium, loose, damp, no odor.	
2		8.32	0.0					
4				FL				
3			20				SAND, SILT & CINDER, black, occasional gravel & bricks, firm, moist, no odor.	
4		13.11	20.8	FL				
8				FL			CLAYEY SILT, black/dark gray, little sand & cinders, firm, damp, no odor.	
5			0.0				SAND, brown/yellow, fine to medium, occasional gravel & coarse sand, loose, dry, no odor.	
6		11.55	0.0					
12				SP				
7			0.0					
8		9.78	0.0					
16							End of Boring at 16 feet bgs. Soil samples 2'-3', 6'-8' and 10'-12' analyzed for TCL and TAL analysis. Soil samples 11'-12' analyzed for grain size analysis. Soil samples 14'-16' analyzed for hydraulic conductivity analysis.	
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SOIL BORING CONSTRUCTION INFORMATION				SURVEY INFORMATION				WELL CONSTRUCTION INFORMATION			
Date/Time Started	: 4/5/2000			Northing Coord.	: N/A			Well Screen Type	: N/A		
Date/ Time Completed:	4/5/2000			Easting Coord.	: N/A			Well Screen Slot Size	: N/A		
Total Depth of Boring	: 8 feet bgs			Top of Casing Elev.	: N/A			Length of Well Screen	: N/A		
Total Depth of Well	: N/A			Surface Elevation	: N/A			Well Riser Type	: N/A		
Logged By	: Larry Bertsch			GW Elevation Drilling	: N/A			Length of Riser	: N/A		
Drilling Method	: Geoprobe			GW Elevation Final	: N/A			Well Diameter	: N/A		
Hole Diameter	: 2 inches			Surveyed By	: N/A			Joints	: N/A		
Drilling Company	: Soil Probe, Inc.			Date Surveyed	: N/A			Annular Seal	: N/A		
Sampling Method	: Direct Push			Benchmark Reference	: N/A			Well Completed as	: N/A		
Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION				
0							3" asphalt, CRUSHED STONE, GRAVEL & SAND, dry, no odor.				
1			0.0			FL	SILTY CLAY, gray/brown, trace gravel, concrete & brick cinders, firm, damp, no odor.				
2		6.23	0.0								
4				FL							
3			0.0								
4		5.93	0.0			FL	LIMESTONE & CONCRETE rubbles				
8							Refusal at 8 feet bgs. End of Boring at 8 feet bgs.				
12											

SOIL BORING CONSTRUCTION INFORMATION			SURVEY INFORMATION			WELL CONSTRUCTION INFORMATION		
Date/Time Started	:	4/5/2000 @ 1015	Northing Coord.	:	N/A	Well Screen Type	:	N/A
Date/ Time Completed:	:	4/5/2000	Easting Coord.	:	N/A	Well Screen Slot Size	:	N/A
Total Depth of Boring	:	8 feet bgs	Top of Casing Elev.	:	N/A	Length of Well Screen	:	N/A
Total Depth of Well	:	N/A	Surface Elevation	:	N/A	Well Riser Type	:	N/A
Logged By	:	Larry Bertsch	GW Elevation Drilling	:	N/A	Length of Riser	:	N/A
Drilling Method	:	Geoprobe	GW Elevation Final	:	N/A	Well Diameter	:	N/A
Hole Diameter	:	2 inches	Surveyed By	:	N/A	Joints	:	N/A
Drilling Company	:	Soil Probe, Inc.	Date Surveyed	:	N/A	Annular Seal	:	N/A
Sampling Method	:	Direct Push	Benchmark Reference	:	N/A	Well Completed as	:	N/A
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Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION	
0							SILT, SAND & GRAVEL, dark brown, little concrete & cinders, occasional bricks, firm, moist, no odor.	
4							FL	
8							End of Boring at 8 feet bgs. Refusal at 8 feet bgs.	
12								

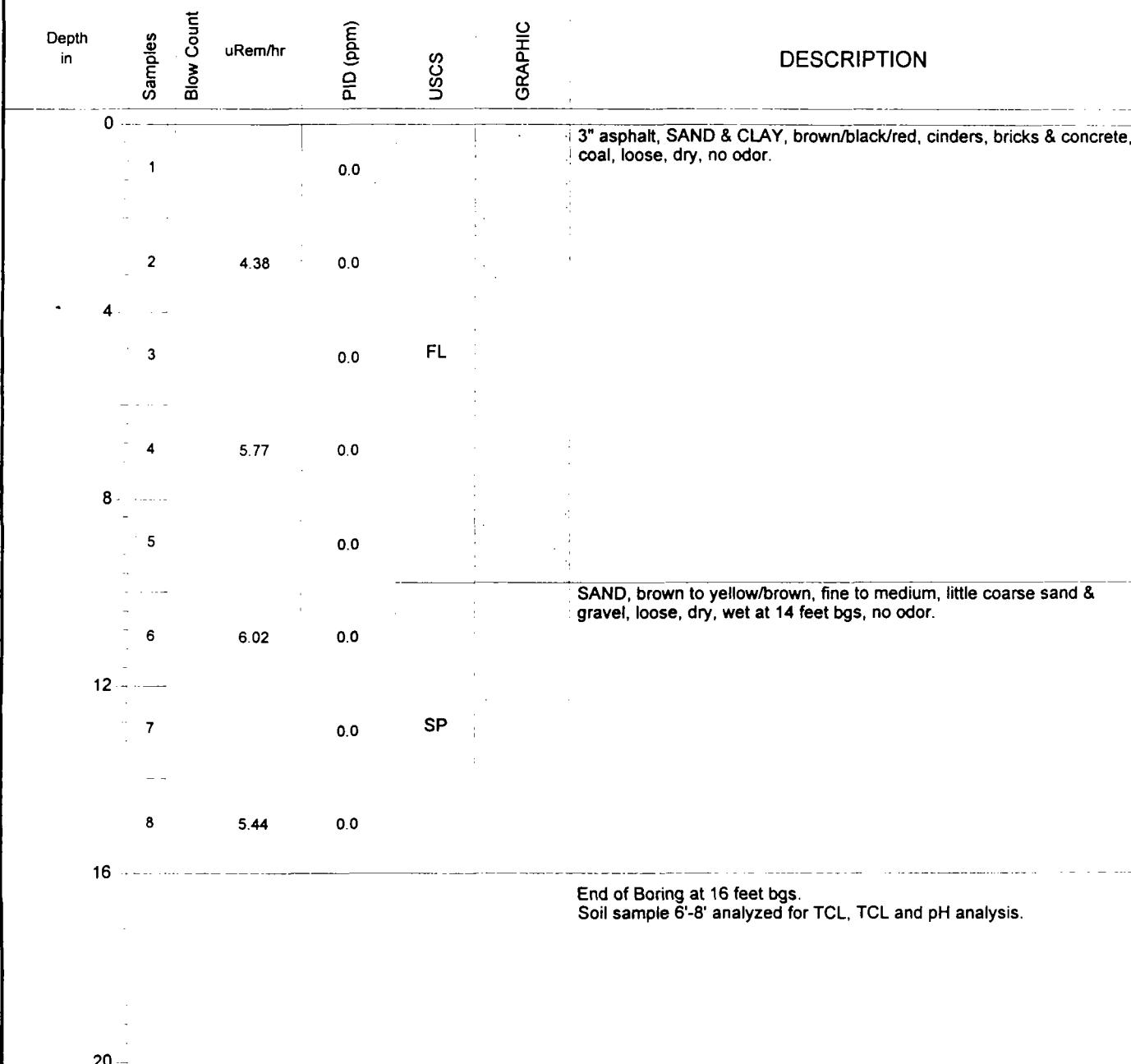
SOIL BORING CONSTRUCTION INFORMATION				SURVEY INFORMATION				WELL CONSTRUCTION INFORMATION			
Date/Time Started	: 4/5/2000			Northing Coord.	: N/A			Well Screen Type	: N/A		
Date/ Time Completed:	4/5/2000			Easting Coord.	: N/A			Well Screen Slot Size	: N/A		
Total Depth of Boring	: 16 feet bgs			Top of Casing Elev.	: N/A			Length of Well Screen	: N/A		
Total Depth of Well	: N/A			Surface Elevation	: N/A			Well Riser Type	: N/A		
Logged By	: Larry Bertsch			GW Elevation Drilling	: N/A			Length of Riser	: N/A		
Drilling Method	: Geoprobe			GW Elevation Final	: N/A			Well Diameter	: N/A		
Hole Diameter	: 2 inches			Surveyed By	: N/A			Joints	: N/A		
Drilling Company	: Soil Probe, Inc.			Date Surveyed	: N/A			Annular Seal	: N/A		
Sampling Method	: Direct Push			Benchmark Reference	: N/A			Well Completed as	: N/A		
Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION				
0							4" asphalt, 6" concrete, SAND, brown, dark brown, little clay, concrete & bricks, trace cinders				
1				0.0							
2		5.24		0.0							
4					FL						
3				0.0							
4		5.33		0.0							
8							SAND, brown, fine to medium, occasional coarse sand, loose, dry, no odor.				
5				0.0							
6		5.69		0.0							
12					SP						
7				0.0							
8		5.55		0.0							
16							End of Boring at 16 feet bgs. Soil samples 1'-3' and 8'-10' analyzed for TCL and TAL analysis.				
20											

SOIL BORING CONSTRUCTION INFORMATION			SURVEY INFORMATION			WELL CONSTRUCTION INFORMATION		
Date/Time Started	: 4/5/2000 @ 11:45		Northing Coord.	: N/A		Well Screen Type	: N/A	
Date/ Time Completed:	4/5/2000		Easting Coord.	: N/A		Well Screen Slot Size	: N/A	
Total Depth of Boring	: 12 feet bgs		Top of Casing Elev.	: N/A		Length of Well Screen	: N/A	
Total Depth of Well	: N/A		Surface Elevation	: N/A		Well Riser Type	: N/A	
Logged By	: Larry Bertsch		GW Elevation Drilling	: N/A		Length of Riser	: N/A	
Drilling Method	: Geoprobe		GW Elevation Final	: N/A		Well Diameter	: N/A	
Hole Diameter	: 2 inches		Surveyed By	: N/A		Joints	: N/A	
Drilling Company	: Soil Probe, Inc.		Date Surveyed	: N/A		Annular Seal	: N/A	
Sampling Method	: Direct Push		Benchmark Reference	: N/A		Well Completed as	: N/A	
Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION	
0							SAND, black black/brown, cinders, bricks & concrete, loose, moist, dark gray fine sand with white spotting.	
1		45		N/A				
2		207		N/A				
4								
3		67		N/A	FL			
4		12.23		N/A				
8							SAND, brown, fine to medium, loose, dry, no odor.	
5				N/A				
6		7.24		N/A	SP			
12							End of Boring at 12 feet bgs.	
16								
20								

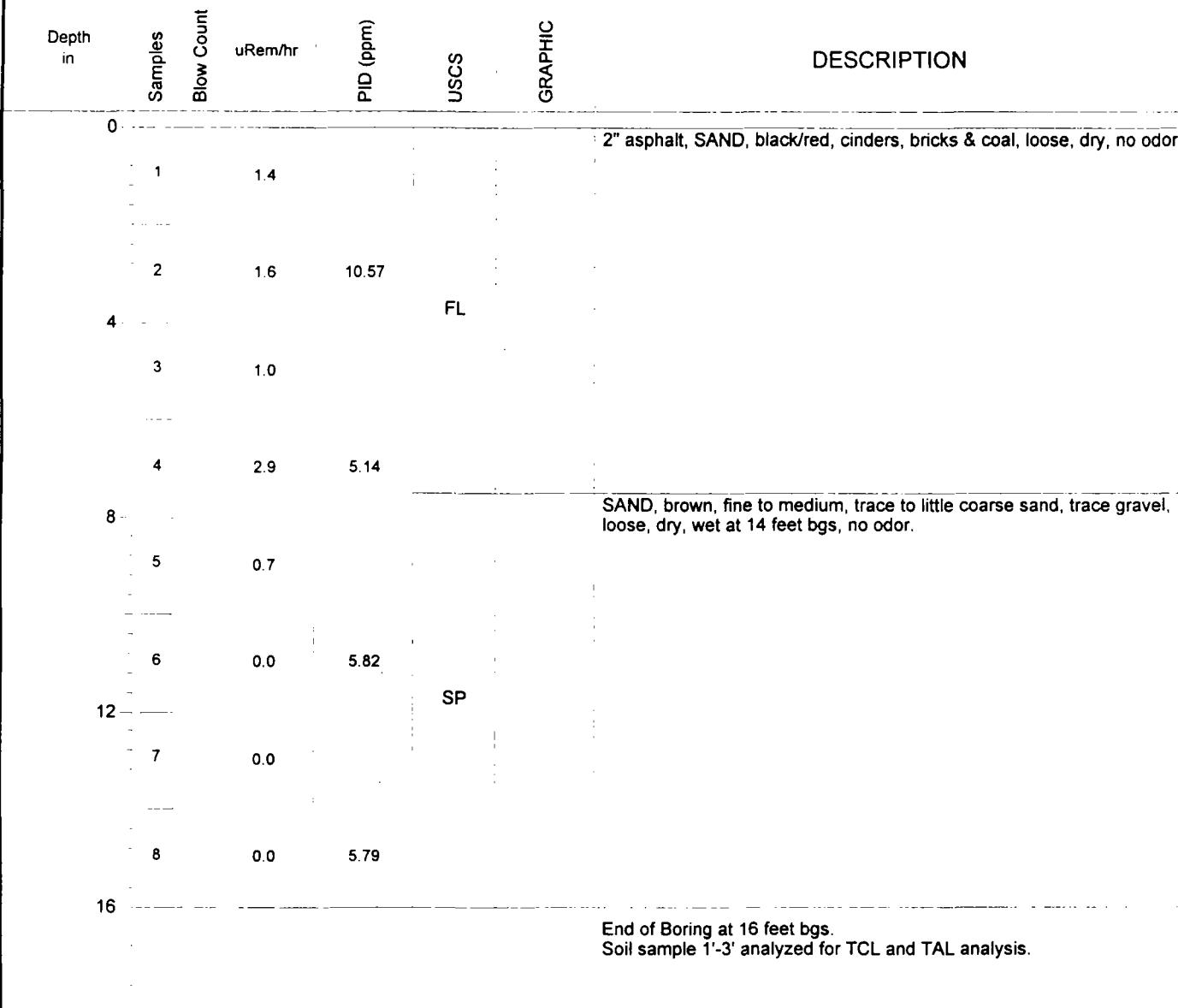
SOIL BORING CONSTRUCTION INFORMATION			SURVEY INFORMATION			WELL CONSTRUCTION INFORMATION		
Date/Time Started	4/5/2000		Northing Coord.	: N/A		Well Screen Type	: N/A	
Date/ Time Completed	4/5/2000		Easting Coord.	: N/A		Well Screen Slot Size	: N/A	
Total Depth of Boring	7.5 feet bgs		Top of Casing Elev.	: N/A		Length of Well Screen	: N/A	
Total Depth of Well	N/A		Surface Elevation	: N/A		Well Riser Type	: N/A	
Logged By	Larry Bertsch		GW Elevation Drilling	: N/A		Length of Riser	: N/A	
Drilling Method	Geoprobe		GW Elevation Final	: N/A		Well Diameter	: N/A	
Hole Diameter	2 inches		Surveyed By	: N/A		Joints	: N/A	
Drilling Company	Soil Probe, Inc.		Date Surveyed	: N/A		Annular Seal	: N/A	
Sampling Method	Direct Push		Benchmark Reference:	N/A		Well Completed as	: N/A	
<hr/>								
Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION	
0							SAND, brown to black, cinders, bricks & concrete, sand, loose, dry, no odor.	
1				0.0				
2		4.62	0.0					
4				FL				
3			0.0					
4		4.82	0.0					
8							Refusal at 7.5 feet bgs. End of Boring at 7.5 feet bgs. Soil sample 6'-7.5' analyzed for TCL, TCL and pH analysis.	
12								

SOIL BORING CONSTRUCTION INFORMATION			SURVEY INFORMATION			WELL CONSTRUCTION INFORMATION		
Date/Time Started	: 4/5/2000 @1350		Northing Coord.	: N/A		Well Screen Type	: N/A	
Date/ Time Completed:	4/5/2000		Easting Coord.	: N/A		Well Screen Slot Size	: N/A	
Total Depth of Boring	: 16 feet bgs		Top of Casing Elev.	: N/A		Length of Well Screen	: N/A	
Total Depth of Well	: N/A		Surface Elevation	: N/A		Well Riser Type	: N/A	
Logged By	: Larry Bertsch		GW Elevation Drilling	: N/A		Length of Riser	: N/A	
Drilling Method	: Geoprobe		GW Elevation Final	: N/A		Well Diameter	: N/A	
Hole Diameter	: 2 inches		Surveyed By	: N/A		Joints	: N/A	
Drilling Company	: Soil Probe, Inc.		Date Surveyed	: N/A		Annular Seal	: N/A	
Sampling Method	: Direct Push		Benchmark Reference	: N/A		Well Completed as	: N/A	
Depth in	Samples	Blow Count	uRem/hr	PID (ppm)	USCS	GRAPHIC	DESCRIPTION	
0								
1				0.0			2" asphalt, SAND, brown/black, cinders, bricks & concrete, coal, loose, dry, dry, no odor.	
2		3.61		0.0	FL			
4								
5				0.0				
8							CLAYEY SAND, brown, little gravel & cinders, firm	
12					FL			
16							SAND, brown, fine to medium, occasional coarse sand & gravel, dry, wet at 14 feet bgs, no odor.	
20								

SOIL BORING CONSTRUCTION INFORMATION		SURVEY INFORMATION		WELL CONSTRUCTION INFORMATION	
Date/Time Started	: 4/5/2000 @1440	Northing Coord.	: N/A	Well Screen Type	: N/A
Date/ Time Completed:	4/5/2000	Easting Coord.	: N/A	Well Screen Slot Size	: N/A
Total Depth of Boring	: 16 feet bgs	Top of Casing Elev.	: N/A	Length of Well Screen	: N/A
Total Depth of Well	: N/A	Surface Elevation	: N/A	Well Riser Type	: N/A
Logged By	: Larry Bertsch	GW Elevation Drilling	: N/A	Length of Riser	: N/A
Drilling Method	: Geoprobe	GW Elevation Final	: N/A	Well Diameter	: N/A
Hole Diameter	: 2 inches	Surveyed By	: N/A	Joints	: N/A
Drilling Company	: Soil Probe, Inc.	Date Surveyed	: N/A	Annular Seal	: N/A
Sampling Method	: Direct Push	Benchmark Reference	: N/A	Well Completed as	: N/A



SOIL BORING CONSTRUCTION INFORMATION		SURVEY INFORMATION		WELL CONSTRUCTION INFORMATION	
Date/Time Started	: 4/5/2000 @1525	Northing Coord.	: N/A	Well Screen Type	: N/A
Date/ Time Completed:	4/5/2000	Easting Coord.	: N/A	Well Screen Slot Size	: N/A
Total Depth of Boring	: 16 feet bgs	Top of Casing Elev.	: N/A	Length of Well Screen	: N/A
Total Depth of Well	: N/A	Surface Elevation	: N/A	Well Riser Type	: N/A
Logged By	: Larry Bertsch	GW Elevation Drilling	: N/A	Length of Riser	: N/A
Drilling Method	: Geoprobe	GW Elevation Final	: N/A	Well Diameter	: N/A
Hole Diameter	: 2 inches	Surveyed By	: N/A	Joints	: N/A
Drilling Company	: Soil Probe, Inc.	Date Surveyed	: N/A	Annular Seal	: N/A
Sampling Method	: Direct Push	Benchmark Reference	: N/A	Well Completed as	: N/A



20

Appendix B
Site Photographs



Photograph 1: Looking east at vacant property. (4-4-00)



Photograph 2: Looking east as GP-3 is advanced. (4-4-00)

Time-Life Property
Chicago, Illinois

Site Photographs

Project No: 4917-410-0

GaiaTech^{INC}
Environmental Planning
for Business



Photograph 3: Looking west as GP-9 is advanced. (4-5-00)



Photograph 4: Looking west as Soil Boring GP-13 is advanced. (4-5-00)

Time-Life Property
Chicago, Illinois

Site Photographs

Project No: 4917-410-0

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Photograph 5: Looking east at unknown utility vault discovered by the advancement of GP-13. (4-5-00)



Photograph 6: Looking into interior of utility vault near GP-13. (4-5-00)

Time-Life Property
Chicago, Illinois

Site Photographs

Project No: 4917-410-0

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Appendix C

Laboratory Analytical Reports

- Soil Analytical Reports**
- Groundwater Analytical Reports**

Soil Analytical Reports



**First
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IEPA Certification #100292

April 14, 2000

Mr. Larry Bertsch
GAIATECH INC.
1 North Franklin, Suite 2500
Chicago, IL 60606

Project ID: 4917-410-0
First Environmental File ID: 95506-12
Date Received: April 6th, 2000

Dear Mr. Bertsch:

These samples were analyzed as directed on the enclosed chain of custody.

All analyses were performed in accordance with methods from the USEPA publication Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition, December 1996. The actual method references are listed on the Analytical Report. Results have been expressed on a dry weight basis per method protocol. You will note elevated reporting limits due to matrix interferences.

All analyses were performed within established holding times, and all Quality Control criteria as outlined in the methods have been met. QA/QC documentation and raw data will remain on file for future reference.

It has been a pleasure providing you with analytical services, and we look forward to working with you again in the future. If you have any questions regarding this report, or need additional information, please contact me at (630) 778-1200.

Sincerely,

Stan Zaworski
Project Manager



First Environmental Laboratories, Inc.

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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95506	Date Taken:	04/05/00
Sample Description:	GP-9 1-3'	Time Taken:	09:10
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Solids, Total	86.12	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95506	Date Taken:	04/05/00
Sample Description:	GP-9 1-3'	Time Taken:	09:10
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/10/00

Analysis Date: 04/11/00

Acenaphthene	543	ug/kg
Acenaphthylene	< 330	ug/kg
Anthracene	752	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	922	ug/kg
Benzo[b]fluoranthene	741	ug/kg
Benzo[k]fluoranthene	626	ug/kg
Benzo[g,h,i]perylene	376	ug/kg
Benzo[a]pyrene	826	ug/kg
Benzoic Acid	< 330	ug/kg
Benzyl alcohol	< 330	ug/kg
bis(2-Chloroethoxy)methane	< 330	ug/kg
bis(2-Chloroethyl)ether	< 330	ug/kg
bis(2-chloroisopropyl)ether	< 330	ug/kg
bis(2-Ethylhexyl)phthalate	< 330	ug/kg
4-Bromophenyl-phenylether	< 330	ug/kg
Butylbenzylphthalate	< 330	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95506	Date Taken:	04/05/00
Sample Description:	GP-9 1-3'	Time Taken:	09:10
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 330	ug/kg	
4-Chloro-3-methylphenol	< 330	ug/kg	
2-Choronaphthalene	< 330	ug/kg	
2-Chlorophenol	< 330	ug/kg	
4-Chlorophenyl-phenylether	< 330	ug/kg	
Chrysene	868	ug/kg	
Dibenz[a,h]anthracene	< 330	ug/kg	
Dibenzofuran	393	ug/kg	
1,2-Dichlorobenzene	< 330	ug/kg	
1,3-Dichlorobenzene	< 330	ug/kg	
1,4-Dichlorobenzene	< 330	ug/kg	
3,3'-Dichlorobenzidine	< 660	ug/kg	
2,4-Dichlorophenol	< 330	ug/kg	
Diethylphthalate	< 330	ug/kg	
2,4-Dimethylphenol	< 330	ug/kg	
Dimethylphthalate	< 330	ug/kg	
Di-n-butylphthalate	< 330	ug/kg	
4,6-Dinitro-2-methylphenol	< 1,600	ug/kg	
2,4-Dinitrophenol	< 1,600	ug/kg	
2,4-Dinitrotoluene	< 330	ug/kg	
2,6-Dinitrotoluene	< 330	ug/kg	
Di-n-octylphthalate	< 330	ug/kg	
Fluoranthene	2,810	ug/kg	
Fluorene	524	ug/kg	
Hexachlorobenzene	< 330	ug/kg	
Hexachlorobutadiene	< 330	ug/kg	
Hexachlorocyclopentadiene	< 330	ug/kg	
Hexachloroethane	< 330	ug/kg	
Indeno[1,2,3-cd]pyrene	394	ug/kg	
Isophorone	< 330	ug/kg	
2-Methylnaphthalene	618	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95506	Date Taken:	04/05/00
Sample Description:	GP-9 1-3'	Time Taken:	09:10
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
2-Methylphenol	< 330	ug/kg	
3&4-Methylphenol	< 330	ug/kg	
Naphthalene	406	ug/kg	
2-Nitroaniline	< 1,600	ug/kg	
3-Nitroaniline	< 1,600	ug/kg	
4-Nitroaniline	< 1,600	ug/kg	
Nitrobenzene	< 330	ug/kg	
2-Nitrophenol	< 1,600	ug/kg	
4-Nitrophenol	< 1,600	ug/kg	
N-Nitrosodimethylamine	< 330	ug/kg	
N-Nitroso-di-n-propylamine	< 330	ug/kg	
n-Nitrosodiphenylamine	< 330	ug/kg	
Pentachlorophenol	< 1,600	ug/kg	
Phenanthrene	3,570	ug/kg	
Phenol	< 330	ug/kg	
Pyrene	2,070	ug/kg	
1,2,4-Trichlorobenzene	< 330	ug/kg	
2,4,5-Trichlorophenol	< 660	ug/kg	
2,4,6-Trichlorophenol	< 330	ug/kg	



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Analytical Report

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Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95506	Date Taken:	04/05/00
Sample Description:	GP-9 1-3'	Time Taken:	09:10
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
---------	--------	-------	-------

Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/11/00
Date Analyzed: 04/13/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

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Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95506	Date Taken:	04/05/00
Sample Description:	GP-9 1-3'	Time Taken:	09:10
Lab File ID:	95506-12	Date Reported:	04/14/00

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.10	mg/kg	04/07/00	9010B/9014
pH @ 25°C, (1:10)	10.00	units	04/07/00	9045C
Aluminum	10,200	mg/kg	04/12/00	3050B/6010B
Antimony	1.3	mg/kg	04/12/00	3050B/6010B
Arsenic	8.8	mg/kg	04/12/00	3050B/6010B
Barium	57.0	mg/kg	04/12/00	3050B/6010B
Beryllium	0.6	mg/kg	04/12/00	3050B/6010B
Cadmium	1.6	mg/kg	04/12/00	3050B/6010B
Calcium	69,700	mg/kg	04/12/00	3050B/6010B
Chromium	18.4	mg/kg	04/12/00	3050B/6010B
Cobalt	13.3	mg/kg	04/12/00	3050B/6010B
Copper	36.1	mg/kg	04/12/00	3050B/6010B
Iron	23,000	mg/kg	04/12/00	3050B/6010B
Lead	29.0	mg/kg	04/12/00	3050B/6010B
Magnesium	29,700	mg/kg	04/12/00	3050B/6010B
Manganese	428	mg/kg	04/12/00	3050B/6010B
Mercury	<0.05	mg/kg	04/11/00	7470A
Nickel	36.3	mg/kg	04/12/00	3050B/6010B
Potassium	2,560	mg/kg	04/12/00	3050B/6010B
Selenium	<0.2	mg/kg	04/12/00	3050B/6010B
Silver	<0.1	mg/kg	04/12/00	3050B/6010B
Sodium	520	mg/kg	04/12/00	3050B/6010B
Thallium	<1.0	mg/kg	04/12/00	3050B/6010B
Vanadium	21.9	mg/kg	04/12/00	3050B/6010B
Zinc	87.6	mg/kg	04/12/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95507	Date Taken:	04/05/00
Sample Description:	GP-10 6-8'	Time Taken:	09:40
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Solids, Total	74.04	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/11/00

Acetone	228	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	72.4	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95507	Date Taken:	04/05/00
Sample Description:	GP-10 6-8'	Time Taken:	09:40
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/10/00
Analysis Date: 04/12/00

Acenaphthene	< 330	ug/kg
Acenaphthylene	333	ug/kg
Anthracene	1,210	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	5,000	ug/kg
Benzo[b]fluoranthene	6,330	ug/kg
Benzo[k]fluoranthene	4,290	ug/kg
Benzo[g,h,i]perylene	1,160	ug/kg
Benzo[a]pyrene	5,940	ug/kg
Benzoic Acid	< 330	ug/kg
Benzyl alcohol	< 330	ug/kg
bis(2-Chloroethoxy)methane	< 330	ug/kg
bis(2-Chloroethyl)ether	< 330	ug/kg
bis(2-chloroisopropyl)ether	< 330	ug/kg
bis(2-Ethylhexyl)phthalate	< 330	ug/kg
4-Bromophenyl-phenylether	< 330	ug/kg
Butylbenzylphthalate	< 330	ug/kg



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Analytical Report

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Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95507	Date Taken:	04/05/00
Sample Description:	GP-10 6-8'	Time Taken:	09:40
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 330	ug/kg	
4-Chloro-3-methylphenol	< 330	ug/kg	
2-Chloronaphthalene	< 330	ug/kg	
2-Chlorophenol	< 330	ug/kg	
4-Chlorophenyl-phenylether	< 330	ug/kg	
Chrysene	3,990	ug/kg	
Dibenz[a,h]anthracene	729	ug/kg	
Dibenzofuran	409	ug/kg	
1,2-Dichlorobenzene	< 330	ug/kg	
1,3-Dichlorobenzene	< 330	ug/kg	
1,4-Dichlorobenzene	< 330	ug/kg	
3,3'-Dichlorobenzidine	< 660	ug/kg	
2,4-Dichlorophenol	< 330	ug/kg	
Diethylphthalate	< 330	ug/kg	
2,4-Dimethylphenol	< 330	ug/kg	
Dimethylphthalate	< 330	ug/kg	
Di-n-butylphthalate	< 330	ug/kg	
4,6-Dinitro-2-methylphenol	< 1,600	ug/kg	
2,4-Dinitrophenol	< 1,600	ug/kg	
2,4-Dinitrotoluene	< 330	ug/kg	
2,6-Dinitrotoluene	< 330	ug/kg	
Di-n-octylphthalate	< 330	ug/kg	
Fluoranthene	5,900	ug/kg	
Fluorene	427	ug/kg	
Hexachlorobenzene	< 330	ug/kg	
Hexachlorobutadiene	< 330	ug/kg	
Hexachlorocyclopentadiene	< 330	ug/kg	
Hexachloroethane	< 330	ug/kg	
Indeno[1,2,3-cd]pyrene	1,540	ug/kg	
Isophorone	< 330	ug/kg	
2-Methylnaphthalene	360	ug/kg	



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Analytical Report

Client: GAIA TECH, INC.

Project ID: 4917-410-0

Date Received: 04/06/00

Sample Number: 95507

Date Taken: 04/05/00

Sample Description: GP-10 6-8'

Time Taken: 09:40

Lab File ID: 95506-12

Date Reported: 04/13/00

Analyte	Result	Units	Flags
2-Methylphenol	< 330	ug/kg	
3&4-Methylphenol	461	ug/kg	
Naphthalene	683	ug/kg	
2-Nitroaniline	< 1,600	ug/kg	
3-Nitroaniline	< 1,600	ug/kg	
4-Nitroaniline	< 1,600	ug/kg	
Nitrobenzene	< 330	ug/kg	
2-Nitrophenol	< 1,600	ug/kg	
4-Nitrophenol	< 1,600	ug/kg	
N-Nitrosodimethylamine	< 330	ug/kg	
N-Nitroso-di-n-propylamine	< 330	ug/kg	
n-Nitrosodiphenylamine	< 330	ug/kg	
Pentachlorophenol	< 1,600	ug/kg	
Phenanthrene	3,180	ug/kg	
Phenol	< 330	ug/kg	
Pyrene	5,780	ug/kg	
1,2,4-Trichlorobenzene	< 330	ug/kg	
2,4,5-Trichlorophenol	< 660	ug/kg	
2,4,6-Trichlorophenol	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95507	Date Taken:	04/05/00
Sample Description:	GP-10 6-8'	Time Taken:	09:40
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/11/00

Date Analyzed: 04/13/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.			
Project ID:	4917-410-0	Date Received:	04/06/00	
Sample Number:	95507	Date Taken:	04/05/00	
Sample Description:	GP-10 6-8'	Time Taken:	09:40	
Lab File ID:	95506-12	Date Reported:	04/14/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.10	mg/kg	04/11/00	9010B/9014
pH @ 25°C, (1:10)	8.08	units	04/07/00	9045C
Aluminum	6,130	mg/kg	04/12/00	3050B/6010B
Antimony	2.5	mg/kg	04/12/00	3050B/6010B
Arsenic	13.2	mg/kg	04/12/00	3050B/6010B
Barium	85.1	mg/kg	04/12/00	3050B/6010B
Beryllium	0.8	mg/kg	04/12/00	3050B/6010B
Cadmium	2.3	mg/kg	04/12/00	3050B/6010B
Calcium	35,100	mg/kg	04/12/00	3050B/6010B
Chromium	12.0	mg/kg	04/12/00	3050B/6010B
Cobalt	7.2	mg/kg	04/12/00	3050B/6010B
Copper	88.0	mg/kg	04/12/00	3050B/6010B
Iron	22,800	mg/kg	04/12/00	3050B/6010B
Lead	519	mg/kg	04/12/00	3050B/6010B
Magnesium	15,200	mg/kg	04/12/00	3050B/6010B
Manganese	307	mg/kg	04/12/00	3050B/6010B
Mercury	0.85	mg/kg	04/12/00	7470A
Nickel	18.8	mg/kg	04/12/00	3050B/6010B
Potassium	1,090	mg/kg	04/12/00	3050B/6010B
Selenium	<0.2	mg/kg	04/12/00	3050B/6010B
Silver	0.2	mg/kg	04/12/00	3050B/6010B
Sodium	684	mg/kg	04/12/00	3050B/6010B
Thallium	<1.0	mg/kg	04/12/00	3050B/6010B
Vanadium	19.4	mg/kg	04/12/00	3050B/6010B
Zinc	225	mg/kg	04/12/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95508	Date Taken:	04/05/00
Sample Description:	GP-11 2-3'	Time Taken:	10:20
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Solids, Total	95.08	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95508	Date Taken:	04/05/00
Sample Description:	GP-11 2-3'	Time Taken:	10:20
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/10/00
Analysis Date: 04/12/00

Acenaphthene	< 330	ug/kg
Acenaphthylene	< 330	ug/kg
Anthracene	< 330	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	< 330	ug/kg
Benzo[b]fluoranthene	< 330	ug/kg
Benzo[k]fluoranthene	< 330	ug/kg
Benzo[g,h,i]perylene	< 330	ug/kg
Benzo[a]pyrene	< 330	ug/kg
Benzoic Acid	< 330	ug/kg
Benzyl alcohol	< 330	ug/kg
bis(2-Chloroethoxy)methane	< 330	ug/kg
bis(2-Chloroethyl)ether	< 330	ug/kg
bis(2-chloroisopropyl)ether	< 330	ug/kg
bis(2-Ethylhexyl)phthalate	< 330	ug/kg
4-Bromophenyl-phenylether	< 330	ug/kg
Butylbenzylphthalate	< 330	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95508	Date Taken:	04/05/00
Sample Description:	GP-11 2-3'	Time Taken:	10:20
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 330	ug/kg	
4-Chloro-3-methylphenol	< 330	ug/kg	
2-Chloronaphthalene	< 330	ug/kg	
2-Chlorophenol	< 330	ug/kg	
4-Chlorophenyl-phenylether	< 330	ug/kg	
Chrysene	< 330	ug/kg	
Dibenz[a,h]anthracene	< 330	ug/kg	
Dibenzofuran	< 330	ug/kg	
1,2-Dichlorobenzene	< 330	ug/kg	
1,3-Dichlorobenzene	< 330	ug/kg	
1,4-Dichlorobenzene	< 330	ug/kg	
3,3'-Dichlorobenzidine	< 660	ug/kg	
2,4-Dichlorophenol	< 330	ug/kg	
Diethylphthalate	< 330	ug/kg	
2,4-Dimethylphenol	< 330	ug/kg	
Dimethylphthalate	< 330	ug/kg	
Di-n-butylphthalate	< 330	ug/kg	
4,6-Dinitro-2-methylphenol	< 1,600	ug/kg	
2,4-Dinitrophenol	< 1,600	ug/kg	
2,4-Dinitrotoluene	< 330	ug/kg	
2,6-Dinitrotoluene	< 330	ug/kg	
Di-n-octylphthalate	< 330	ug/kg	
Fluoranthene	< 330	ug/kg	
Fluorene	< 330	ug/kg	
Hexachlorobenzene	< 330	ug/kg	
Hexachlorobutadiene	< 330	ug/kg	
Hexachlorocyclopentadiene	< 330	ug/kg	
Hexachloroethane	< 330	ug/kg	
Indeno[1,2,3-cd]pyrene	< 330	ug/kg	
Isophorone	< 330	ug/kg	
2-Methylnaphthalene	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95508	Date Taken:	04/05/00
Sample Description:	GP-11 2-3'	Time Taken:	10:20
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
2-Methylphenol	< 330	ug/kg	
3&4-Methylphenol	< 330	ug/kg	
Naphthalene	< 330	ug/kg	
2-Nitroaniline	< 1,600	ug/kg	
3-Nitroaniline	< 1,600	ug/kg	
4-Nitroaniline	< 1,600	ug/kg	
Nitrobenzene	< 330	ug/kg	
2-Nitrophenol	< 1,600	ug/kg	
4-Nitrophenol	< 1,600	ug/kg	
N-Nitrosodimethylamine	< 330	ug/kg	
N-Nitroso-di-n-propylamine	< 330	ug/kg	
n-Nitrosodiphenylamine	< 330	ug/kg	
Pentachlorophenol	< 1,600	ug/kg	
Phenanthrene	< 330	ug/kg	
Phenol	< 330	ug/kg	
Pyrene	< 330	ug/kg	
1,2,4-Trichlorobenzene	< 330	ug/kg	
2,4,5-Trichlorophenol	< 660	ug/kg	
2,4,6-Trichlorophenol	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95508	Date Taken:	04/05/00
Sample Description:	GP-11 2-3'	Time Taken:	10:20
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/11/00

Date Analyzed: 04/13/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.			
Project ID:	4917-410-0	Date Received:	04/06/00	
Sample Number:	95508	Date Taken:	04/05/00	
Sample Description:	GP-11 2-3'	Time Taken:	10:20	
Lab File ID:	95506-12	Date Reported:	04/14/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.10	mg/kg	04/07/00	9010B/9014
pH @ 25°C, (1:10)	9.30	units	04/07/00	9045C
Aluminum	4,920	mg/kg	04/12/00	3050B/6010B
Antimony	<1.0	mg/kg	04/12/00	3050B/6010B
Arsenic	4.1	mg/kg	04/12/00	3050B/6010B
Barium	33.4	mg/kg	04/12/00	3050B/6010B
Beryllium	0.4	mg/kg	04/12/00	3050B/6010B
Cadmium	0.9	mg/kg	04/12/00	3050B/6010B
Calcium	43,300	mg/kg	04/12/00	3050B/6010B
Chromium	9.6	mg/kg	04/12/00	3050B/6010B
Cobalt	7.0	mg/kg	04/12/00	3050B/6010B
Copper	25.5	mg/kg	04/12/00	3050B/6010B
Iron	12,800	mg/kg	04/12/00	3050B/6010B
Lead	60.6	mg/kg	04/12/00	3050B/6010B
Magnesium	17,700	mg/kg	04/12/00	3050B/6010B
Manganese	293	mg/kg	04/12/00	3050B/6010B
Mercury	0.09	mg/kg	04/11/00	7470A
Nickel	18.1	mg/kg	04/12/00	3050B/6010B
Potassium	960	mg/kg	04/12/00	3050B/6010B
Selenium	<0.2	mg/kg	04/12/00	3050B/6010B
Silver	<0.1	mg/kg	04/12/00	3050B/6010B
Sodium	204	mg/kg	04/12/00	3050B/6010B
Thallium	<1.0	mg/kg	04/12/00	3050B/6010B
Vanadium	12.2	mg/kg	04/12/00	3050B/6010B
Zinc	70.8	mg/kg	04/12/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95509_3	Date Taken:	04/05/00
Sample Description:	GP-14 6-7.5'	Time Taken:	12:58
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Solids, Total	78.45	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95509 ¹³	Date Taken:	04/05/00
Sample Description:	GP-J4 6-7.5'	Time Taken:	12:58
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/10/00
Analysis Date: 04/12/00

Acenaphthene	115,000	ug/kg
Acenaphthylene	< 3,300	ug/kg
Anthracene	350,000	ug/kg
Benzidine	< 3,300	ug/kg
Benzo[a]anthracene	302,000	ug/kg
Benzo[b]fluoranthene	22,700	ug/kg
Benzo[k]fluoranthene	156,000	ug/kg
Benzo[g,h,i]perylene	106,000	ug/kg
Benzo[a]pyrene	223,000	ug/kg
Benzoic Acid	< 3,300	ug/kg
Benzyl alcohol	< 3,300	ug/kg
bis(2-Chloroethoxy)methane	< 3,300	ug/kg
bis(2-Chloroethyl)ether	< 3,300	ug/kg
bis(2-chloroisopropyl)ether	< 3,300	ug/kg
bis(2-Ethylhexyl)phthalate	< 3,300	ug/kg
4-Bromophenyl-phenylether	< 3,300	ug/kg
Butylbenzylphthalate	< 3,300	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95509 13	Date Taken:	04/05/00
Sample Description:	GP- 14 6-7.5'	Time Taken:	12:58
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 3,300	ug/kg	
4-Chloro-3-methylphenol	< 3,300	ug/kg	
2-Chloronaphthalene	< 3,300	ug/kg	
2-Chlorophenol	< 3,300	ug/kg	
4-Chlorophenyl-phenylether	< 3,300	ug/kg	
Chrysene	271,000	ug/kg	
Dibenz[a,h]anthracene	46,000	ug/kg	
Dibenzofuran	140,000	ug/kg	
1,2-Dichlorobenzene	< 3,300	ug/kg	
1,3-Dichlorobenzene	< 3,300	ug/kg	
1,4-Dichlorobenzene	< 3,300	ug/kg	
3,3'-Dichlorobenzidine	< 6,600	ug/kg	
2,4-Dichlorophenol	< 3,300	ug/kg	
Diethylphthalate	< 3,300	ug/kg	
2,4-Dimethylphenol	< 3,300	ug/kg	
Dimethylphthalate	< 3,300	ug/kg	
Di-n-butylphthalate	< 3,300	ug/kg	
4,6-Dinitro-2-methylphenol	< 16,000	ug/kg	
2,4-Dinitrophenol	< 16,000	ug/kg	
2,4-Dinitrotoluene	< 3,300	ug/kg	
2,6-Dinitrotoluene	< 3,300	ug/kg	
Di-n-octylphthalate	< 3,300	ug/kg	
Fluoranthene	954,000	ug/kg	
Fluorene	179,000	ug/kg	
Hexachlorobenzene	< 3,300	ug/kg	
Hexachlorobutadiene	< 3,300	ug/kg	
Hexachlorocyclopentadiene	< 3,300	ug/kg	
Hexachloroethane	< 3,300	ug/kg	
Indeno[1,2,3-cd]pyrene	131,000	ug/kg	
Isophorone	< 3,300	ug/kg	
2-Methylnaphthalene	47,500	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95509 ³	Date Taken:	04/05/00
Sample Description:	GP-14 6-7.5'	Time Taken:	12:58
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
2-Methylphenol	< 3,300	ug/kg	
3&4-Methylphenol	< 3,300	ug/kg	
Naphthalene	212,000	ug/kg	
2-Nitroaniline	< 16,000	ug/kg	
3-Nitroaniline	< 16,000	ug/kg	
4-Nitroaniline	< 16,000	ug/kg	
Nitrobenzene	< 3,300	ug/kg	
2-Nitrophenol	< 16,000	ug/kg	
4-Nitrophenol	< 16,000	ug/kg	
N-Nitrosodimethylamine	< 3,300	ug/kg	
N-Nitroso-di-n-propylamine	< 3,300	ug/kg	
n-Nitrosodiphenylamine	< 3,300	ug/kg	
Pentachlorophenol	< 16,000	ug/kg	
Phenanthrene	1,170,000	ug/kg	
Phenol	< 3,300	ug/kg	
Pyrene	607,000	ug/kg	
1,2,4-Trichlorobenzene	< 3,300	ug/kg	
2,4,5-Trichlorophenol	< 6,600	ug/kg	
2,4,6-Trichlorophenol	< 3,300	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95509 3	Date Taken:	04/05/00
Sample Description:	GP-14 6-7.5'	Time Taken:	12:58
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/11/00
Date Analyzed: 04/13/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.			
Project ID:	4917-410-0	Date Received:	04/06/00	
Sample Number:	95509 ³	Date Taken:	04/05/00	
Sample Description:	GP-14 6-7.5'	Time Taken:	12:58	
Lab File ID:	95506-12	Date Reported:	04/14/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	1.25	mg/kg	04/07/00	9010B/9014
pH @ 25°C, (1:10)	8.83	units	04/07/00	9045C
Aluminum	6,780	mg/kg	04/12/00	3050B/6010B
Antimony	2.1	mg/kg	04/12/00	3050B/6010B
Arsenic	11.7	mg/kg	04/12/00	3050B/6010B
Barium	143	mg/kg	04/12/00	3050B/6010B
Beryllium	0.8	mg/kg	04/12/00	3050B/6010B
Cadmium	2.7	mg/kg	04/12/00	3050B/6010B
Calcium	74,400	mg/kg	04/12/00	3050B/6010B
Chromium	16.5	mg/kg	04/12/00	3050B/6010B
Cobalt	9.8	mg/kg	04/12/00	3050B/6010B
Copper	368	mg/kg	04/12/00	3050B/6010B
Iron	26,200	mg/kg	04/12/00	3050B/6010B
Lead	534	mg/kg	04/12/00	3050B/6010B
Magnesium	25,000	mg/kg	04/12/00	3050B/6010B
Manganese	651	mg/kg	04/12/00	3050B/6010B
Mercury	2.00	mg/kg	04/12/00	7470A
Nickel	26.4	mg/kg	04/12/00	3050B/6010B
Potassium	1,180	mg/kg	04/12/00	3050B/6010B
Selenium	<0.2	mg/kg	04/12/00	3050B/6010B
Silver	0.6	mg/kg	04/12/00	3050B/6010B
Sodium	599	mg/kg	04/12/00	3050B/6010B
Thallium	<1.0	mg/kg	04/12/00	3050B/6010B
Vanadium	26.3	mg/kg	04/12/00	3050B/6010B
Zinc	357	mg/kg	04/12/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95510	Date Taken:	04/05/00
Sample Description:	GP-14 9-10'	Time Taken:	14:25
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Solids, Total	96.43	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95510	Date Taken:	04/05/00
Sample Description:	GP-14 9-10'	Time Taken:	14:25
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/10/00
Analysis Date: 04/12/00

Acenaphthene	< 330	ug/kg
Acenaphthylene	< 330	ug/kg
Anthracene	< 330	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	< 330	ug/kg
Benzo[b]fluoranthene	< 330	ug/kg
Benzo[k]fluoranthene	< 330	ug/kg
Benzo[g,h,i]perylene	< 330	ug/kg
Benzo[a]pyrene	< 330	ug/kg
Benzoic Acid	< 330	ug/kg
Benzyl alcohol	< 330	ug/kg
bis(2-Chloroethoxy)methane	< 330	ug/kg
bis(2-Chloroethyl)ether	< 330	ug/kg
bis(2-chloroisopropyl)ether	< 330	ug/kg
bis(2-Ethylhexyl)phthalate	< 330	ug/kg
4-Bromophenyl-phenylether	< 330	ug/kg
Butylbenzylphthalate	< 330	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95510	Date Taken:	04/05/00
Sample Description:	GP-14 9-10'	Time Taken:	14:25
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 330	ug/kg	
4-Chloro-3-methylphenol	< 330	ug/kg	
2-Chloronaphthalene	< 330	ug/kg	
2-Chlorophenol	< 330	ug/kg	
4-Chlorophenyl-phenylether	< 330	ug/kg	
Chrysene	< 330	ug/kg	
Dibenz[a,h]anthracene	< 330	ug/kg	
Dibenzofuran	< 330	ug/kg	
1,2-Dichlorobenzene	< 330	ug/kg	
1,3-Dichlorobenzene	< 330	ug/kg	
1,4-Dichlorobenzene	< 330	ug/kg	
3,3'-Dichlorobenzidine	< 660	ug/kg	
2,4-Dichlorophenol	< 330	ug/kg	
Diethylphthalate	< 330	ug/kg	
2,4-Dimethylphenol	< 330	ug/kg	
Dimethylphthalate	< 330	ug/kg	
Di-n-butylphthalate	< 330	ug/kg	
4,6-Dinitro-2-methylphenol	< 1,600	ug/kg	
2,4-Dinitrophenol	< 1,600	ug/kg	
2,4-Dinitrotoluene	< 330	ug/kg	
2,6-Dinitrotoluene	< 330	ug/kg	
Di-n-octylphthalate	< 330	ug/kg	
Fluoranthene	< 330	ug/kg	
Fluorene	< 330	ug/kg	
Hexachlorobenzene	< 330	ug/kg	
Hexachlorobutadiene	< 330	ug/kg	
Hexachlorocyclopentadiene	< 330	ug/kg	
Hexachloroethane	< 330	ug/kg	
Indeno[1,2,3-cd]pyrene	< 330	ug/kg	
Isophorone	< 330	ug/kg	
2-Methylnaphthalene	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95510	Date Taken:	04/05/00
Sample Description:	GP-14 9-10'	Time Taken:	14:25
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
2-Methylphenol	< 330	ug/kg	
3&4-Methylphenol	< 330	ug/kg	
Naphthalene	< 330	ug/kg	
2-Nitroaniline	< 1,600	ug/kg	
3-Nitroaniline	< 1,600	ug/kg	
4-Nitroaniline	< 1,600	ug/kg	
Nitrobenzene	< 330	ug/kg	
2-Nitrophenol	< 1,600	ug/kg	
4-Nitrophenol	< 1,600	ug/kg	
N-Nitrosodimethylamine	< 330	ug/kg	
N-Nitroso-di-n-propylamine	< 330	ug/kg	
n-Nitrosodiphenylamine	< 330	ug/kg	
Pentachlorophenol	< 1,600	ug/kg	
Phenanthrene	< 330	ug/kg	
Phenol	< 330	ug/kg	
Pyrene	< 330	ug/kg	
1,2,4-Trichlorobenzene	< 330	ug/kg	
2,4,5-Trichlorophenol	< 660	ug/kg	
2,4,6-Trichlorophenol	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95510	Date Taken:	04/05/00
Sample Description:	GP-14 9-10'	Time Taken:	14:25
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/11/00
Date Analyzed: 04/13/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.			
Project ID:	4917-410-0	Date Received:	04/06/00	
Sample Number:	95510	Date Taken:	04/05/00	
Sample Description:	GP-14 9-10'	Time Taken:	14:25	
Lab File ID:	95506-12	Date Reported:	04/14/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.10	mg/kg	04/07/00	9010B/9014
pH @ 25°C, (1:10)	8.96	units	04/07/00	9045C
Aluminum	1,380	mg/kg	04/12/00	3050B/6010B
Antimony	<1.0	mg/kg	04/12/00	3050B/6010B
Arsenic	2.2	mg/kg	04/12/00	3050B/6010B
Barium	3.8	mg/kg	04/12/00	3050B/6010B
Beryllium	<0.1	mg/kg	04/12/00	3050B/6010B
Cadmium	0.4	mg/kg	04/12/00	3050B/6010B
Calcium	43,500	mg/kg	04/12/00	3050B/6010B
Chromium	4.0	mg/kg	04/12/00	3050B/6010B
Cobalt	2.4	mg/kg	04/12/00	3050B/6010B
Copper	4.3	mg/kg	04/12/00	3050B/6010B
Iron	5,850	mg/kg	04/12/00	3050B/6010B
Lead	2.8	mg/kg	04/12/00	3050B/6010B
Magnesium	23,300	mg/kg	04/12/00	3050B/6010B
Manganese	149	mg/kg	04/12/00	3050B/6010B
Mercury	<0.05	mg/kg	04/11/00	7470A
Nickel	3.8	mg/kg	04/12/00	3050B/6010B
Potassium	181	mg/kg	04/12/00	3050B/6010B
Selenium	<0.2	mg/kg	04/12/00	3050B/6010B
Silver	<0.1	mg/kg	04/12/00	3050B/6010B
Sodium	272	mg/kg	04/12/00	3050B/6010B
Thallium	<1.0	mg/kg	04/12/00	3050B/6010B
Vanadium	7.6	mg/kg	04/12/00	3050B/6010B
Zinc	30.9	mg/kg	04/12/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95511	Date Taken:	04/05/00
Sample Description:	GP-15 6-8'	Time Taken:	15:10
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Solids, Total	85.71	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95511	Date Taken:	04/05/00
Sample Description:	GP-15 6-8'	Time Taken:	15:10
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/10/00
Analysis Date: 04/12/00

Acenaphthene	< 330	ug/kg
Acenaphthylene	752	ug/kg
Anthracene	1,400	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	5,150	ug/kg
Benzo[b]fluoranthene	4,530	ug/kg
Benzo[k]fluoranthene	3,610	ug/kg
Benzo[g,h,i]perylene	3,010	ug/kg
Benzo[a]pyrene	5,160	ug/kg
Benzoic Acid	< 330	ug/kg
Benzyl alcohol	< 330	ug/kg
bis(2-Chloroethoxy)methane	< 330	ug/kg
bis(2-Chloroethyl)ether	< 330	ug/kg
bis(2-chloroisopropyl)ether	< 330	ug/kg
bis(2-Ethylhexyl)phthalate	< 330	ug/kg
4-Bromophenyl-phenylether	< 330	ug/kg
Butylbenzylphthalate	< 330	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95511	Date Taken:	04/05/00
Sample Description:	GP-15 6-8'	Time Taken:	15:10
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 330	ug/kg	
4-Chloro-3-methylphenol	< 330	ug/kg	
2-Chloronaphthalene	< 330	ug/kg	
2-Chlorophenol	< 330	ug/kg	
4-Chlorophenyl-phenylether	< 330	ug/kg	
Chrysene	4,880	ug/kg	
Dibenz[a,h]anthracene	1,110	ug/kg	
Dibenzofuran	354	ug/kg	
1,2-Dichlorobenzene	< 330	ug/kg	
1,3-Dichlorobenzene	< 330	ug/kg	
1,4-Dichlorobenzene	< 330	ug/kg	
3,3'-Dichlorobenzidine	< 660	ug/kg	
2,4-Dichlorophenol	< 330	ug/kg	
Diethylphthalate	< 330	ug/kg	
2,4-Dimethylphenol	< 330	ug/kg	
Dimethylphthalate	< 330	ug/kg	
Di-n-butylphthalate	< 330	ug/kg	
4,6-Dinitro-2-methylphenol	< 1,600	ug/kg	
2,4-Dinitrophenol	< 1,600	ug/kg	
2,4-Dinitrotoluene	< 330	ug/kg	
2,6-Dinitrotoluene	< 330	ug/kg	
Di-n-octylphthalate	< 330	ug/kg	
Fluoranthene	9,470	ug/kg	
Fluorene	353	ug/kg	
Hexachlorobenzene	< 330	ug/kg	
Hexachlorobutadiene	< 330	ug/kg	
Hexachlorocyclopentadiene	< 330	ug/kg	
Hexachloroethane	< 330	ug/kg	
Indeno[1,2,3-cd]pyrene	3,450	ug/kg	
Isophorone	< 330	ug/kg	
2-Methylnaphthalene	342	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95511	Date Taken:	04/05/00
Sample Description:	GP-15 6-8'	Time Taken:	15:10
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
2-Methylphenol	< 330	ug/kg	
3&4-Methylphenol	< 330	ug/kg	
Naphthalene	628	ug/kg	
2-Nitroaniline	< 1,600	ug/kg	
3-Nitroaniline	< 1,600	ug/kg	
4-Nitroaniline	< 1,600	ug/kg	
Nitrobenzene	< 330	ug/kg	
2-Nitrophenol	< 1,600	ug/kg	
4-Nitrophenol	< 1,600	ug/kg	
N-Nitrosodimethylamine	< 330	ug/kg	
N-Nitroso-di-n-propylamine	< 330	ug/kg	
n-Nitrosodiphenylamine	< 330	ug/kg	
Pentachlorophenol	< 1,600	ug/kg	
Phenanthrene	6,240	ug/kg	
Phenol	< 330	ug/kg	
Pyrene	7,800	ug/kg	
1,2,4-Trichlorobenzene	< 330	ug/kg	
2,4,5-Trichlorophenol	< 660	ug/kg	
2,4,6-Trichlorophenol	< 330	ug/kg	



**First
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IEPA Certification #100292

Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95511	Date Taken:	04/05/00
Sample Description:	GP-15 6-8'	Time Taken:	15:10
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
---------	--------	-------	-------

Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/11/00

Date Analyzed: 04/13/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.			
Project ID:	4917-410-0	Date Received:	04/06/00	
Sample Number:	95511	Date Taken:	04/05/00	
Sample Description:	GP-15 6-8'	Time Taken:	15:10	
Lab File ID:	95506-12	Date Reported:	04/14/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	0.26	mg/kg	04/07/00	9010B/9014
pH @ 25°C, (1:10)	8.49	units	04/07/00	9045C
Aluminum	2,690	mg/kg	04/12/00	3050B/6010B
Antimony	2.7	mg/kg	04/12/00	3050B/6010B
Arsenic	16.6	mg/kg	04/12/00	3050B/6010B
Barium	115	mg/kg	04/12/00	3050B/6010B
Beryllium	0.6	mg/kg	04/12/00	3050B/6010B
Cadmium	2.7	mg/kg	04/12/00	3050B/6010B
Calcium	35,800	mg/kg	04/12/00	3050B/6010B
Chromium	8.7	mg/kg	04/12/00	3050B/6010B
Cobalt	5.4	mg/kg	04/12/00	3050B/6010B
Copper	86.4	mg/kg	04/12/00	3050B/6010B
Iron	28,200	mg/kg	04/12/00	3050B/6010B
Lead	314	mg/kg	04/12/00	3050B/6010B
Magnesium	18,300	mg/kg	04/12/00	3050B/6010B
Manganese	250	mg/kg	04/12/00	3050B/6010B
Mercury	2.50	mg/kg	04/12/00	7470A
Nickel	13.4	mg/kg	04/12/00	3050B/6010B
Potassium	672	mg/kg	04/12/00	3050B/6010B
Selenium	<0.2	mg/kg	04/12/00	3050B/6010B
Silver	0.6	mg/kg	04/12/00	3050B/6010B
Sodium	672	mg/kg	04/12/00	3050B/6010B
Thallium	<1.0	mg/kg	04/12/00	3050B/6010B
Vanadium	17.0	mg/kg	04/12/00	3050B/6010B
Zinc	378	mg/kg	04/12/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95512	Date Taken:	04/05/00
Sample Description:	GP-16 1-3'	Time Taken:	15:40
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Solids, Total	87.26	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/12/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95512	Date Taken:	04/05/00
Sample Description:	GP-16 1-3'	Time Taken:	15:40
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/10/00
Analysis Date: 04/12/00

Acenaphthene	< 330	ug/kg
Acenaphthylene	< 330	ug/kg
Anthracene	< 330	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	< 330	ug/kg
Benzo[b]fluoranthene	< 330	ug/kg
Benzo[k]fluoranthene	< 330	ug/kg
Benzo[g,h,i]perylene	< 330	ug/kg
Benzo[a]pyrene	< 330	ug/kg
Benzoic Acid	< 330	ug/kg
Benzyl alcohol	< 330	ug/kg
bis(2-Chloroethoxy)methane	< 330	ug/kg
bis(2-Chloroethyl)ether	< 330	ug/kg
bis(2-chloroisopropyl)ether	< 330	ug/kg
bis(2-Ethylhexyl)phthalate	< 330	ug/kg
4-Bromophenyl-phenylether	< 330	ug/kg
Butylbenzylphthalate	< 330	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95512	Date Taken:	04/05/00
Sample Description:	GP-16 1-3'	Time Taken:	15:40
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 330	ug/kg	
4-Chloro-3-methylphenol	< 330	ug/kg	
2-Chloronaphthalene	< 330	ug/kg	
2-Chlorophenol	< 330	ug/kg	
4-Chlorophenyl-phenylether	< 330	ug/kg	
Chrysene	< 330	ug/kg	
Dibenz[a,h]anthracene	< 330	ug/kg	
Dibenzofuran	< 330	ug/kg	
1,2-Dichlorobenzene	< 330	ug/kg	
1,3-Dichlorobenzene	< 330	ug/kg	
1,4-Dichlorobenzene	< 330	ug/kg	
3,3'-Dichlorobenzidine	< 660	ug/kg	
2,4-Dichlorophenol	< 330	ug/kg	
Diethylphthalate	< 330	ug/kg	
2,4-Dimethylphenol	< 330	ug/kg	
Dimethylphthalate	< 330	ug/kg	
Di-n-butylphthalate	< 330	ug/kg	
4,6-Dinitro-2-methylphenol	< 1,600	ug/kg	
2,4-Dinitrophenol	< 1,600	ug/kg	
2,4-Dinitrotoluene	< 330	ug/kg	
2,6-Dinitrotoluene	< 330	ug/kg	
Di-n-octylphthalate	< 330	ug/kg	
Fluoranthene	366	ug/kg	
Fluorene	< 330	ug/kg	
Hexachlorobenzene	< 330	ug/kg	
Hexachlorobutadiene	< 330	ug/kg	
Hexachlorocyclopentadiene	< 330	ug/kg	
Hexachloroethane	< 330	ug/kg	
Indeno[1,2,3-cd]pyrene	< 330	ug/kg	
Isophorone	< 330	ug/kg	
2-Methylnaphthalene	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95512	Date Taken:	04/05/00
Sample Description:	GP-16 1-3'	Time Taken:	15:40
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
2-Methylphenol	< 330	ug/kg	
3&4-Methylphenol	< 330	ug/kg	
Naphthalene	< 330	ug/kg	
2-Nitroaniline	< 1,600	ug/kg	
3-Nitroaniline	< 1,600	ug/kg	
4-Nitroaniline	< 1,600	ug/kg	
Nitrobenzene	< 330	ug/kg	
2-Nitrophenol	< 1,600	ug/kg	
4-Nitrophenol	< 1,600	ug/kg	
N-Nitrosodimethylamine	< 330	ug/kg	
N-Nitroso-di-n-propylamine	< 330	ug/kg	
n-Nitrosodiphenylamine	< 330	ug/kg	
Pentachlorophenol	< 1,600	ug/kg	
Phenanthrene	332	ug/kg	
Phenol	< 330	ug/kg	
Pyrene	382	ug/kg	
1,2,4-Trichlorobenzene	< 330	ug/kg	
2,4,5-Trichlorophenol	< 660	ug/kg	
2,4,6-Trichlorophenol	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95512	Date Taken:	04/05/00
Sample Description:	GP-16 1-3'	Time Taken:	15:40
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/11/00

Date Analyzed: 04/13/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.			
Project ID:	4917-410-0	Date Received:	04/06/00	
Sample Number:	95512	Date Taken:	04/05/00	
Sample Description:	GP-16 1-3'	Time Taken:	15:40	
Lab File ID:	95506-12	Date Reported:	04/14/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.10	mg/kg	04/07/00	9010B/9014
Aluminum	6,580	mg/kg	xx/xx/00	3050B/6010B
Antimony	2.3	mg/kg	04/12/00	3050B/6010B
Arsenic	27.0	mg/kg	04/12/00	3050B/6010B
Barium	463	mg/kg	04/12/00	3050B/6010B
Beryllium	0.9	mg/kg	04/12/00	3050B/6010B
Cadmium	3.8	mg/kg	04/12/00	3050B/6010B
Calcium	17,600	mg/kg	04/12/00	3050B/6010B
Chromium	45	mg/kg	04/12/00	3050B/6010B
Cobalt	12.4	mg/kg	04/12/00	3050B/6010B
Copper	5150	mg/kg	04/12/00	3050B/6010B
Iron	38,200	mg/kg	04/12/00	3050B/6010B
Lead	318	mg/kg	04/12/00	3050B/6010B
Magnesium	5,870	mg/kg	04/12/00	3050B/6010B
Manganese	278	mg/kg	04/12/00	3050B/6010B
Mercury	0.49	mg/kg	04/12/00	7470A
Nickel	98.8	mg/kg	04/12/00	3050B/6010B
Potassium	2,020	mg/kg	04/12/00	3050B/6010B
Selenium	<0.2	mg/kg	04/12/00	3050B/6010B
Silver	0.3	mg/kg	04/12/00	3050B/6010B
Sodium	857	mg/kg	04/12/00	3050B/6010B
Thallium	<1.0	mg/kg	04/12/00	3050B/6010B
Vanadium	21.5	mg/kg	04/12/00	3050B/6010B
Zinc	585	mg/kg	04/12/00	3050B/6010B

CHAIN OF CUSTODY RECORD



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COMPANY NAME: GrataTech INC
 ADDRESS: 7 north Franklin, Suite 2500, Chicago IL 60606
 PHONE: 312 541 4200 FAX: 541-0340
 CONTACT NAME Larry Bertsch
 SAMPLED BY: Jane Becker

Project I.D. 4917 4100
 Send Report To: Larry Bertsch

ANALYSES

DATE/TIME TAKEN	Date	SAMPLE DESCRIPTION	time	ANALYSES				COMMENTS	LAB I.D.
				MATRIX	TAN	TCL	PH		
GP - 9 103'	4/5/00		9:10	Soil	✓	✓	✓		95506
GP - 9 6'9"			9:15					HOLD	
GP - 10 2-3'			930					HOLD	
GP - 10 6-8'			940		✓	✓	✓		95507
GP - 10 10-12'			950						
GP - 11 2-3'			10:20		✓	✓	✓		95508
GP - 11 8-10'			1030					HOLD	
GP - 11 2-3'			1250					HOLD	
GP - 11 6-7.5'			1258	✓	✓	✓			95509
GP - 14 2-3'			1415	✓				HOLD	
GP - 14 9-10'			1425		✓	✓	✓		95510
GP - 15 6-8'			1510		✓	✓	✓		5/11
GP - 15 10-12'			1522					HOLD	

Matrix Codes: S = Soil W = Water O = Other

Preserved in: Lab Field

Cooler Temperature: 6 °C

Notes and Special Instructions:

Relinquished By: Jane Becker Date/Time 4/5/00 Received By: Aileen French Date/Time 4/6/00 02:00
 Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____
 Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____



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~~DO NOT FILE TO RECORD~~

COMPANY NAME: Varatech INC.
ADDRESS: 1 North Franklin, Suite 2500, Chicago, IL
PHONE: 312-541-4200 FAX: 312-541-0310
CONTACT NAME Larry Berstek
SAMPLED BY: Yone Rattanaporn

ANALYSES

Project I.D. 4917-410-0
Send Report To: Larry Bertsch

Matrix Codes: S = Soil W = Water O = Other

Preserved in: Lab Field

Cooler Temperature: 6 °C

Notes and Special Instructions: _____

Relinquished By: Jane Bent Date/Time 7/16/00 Received By: Helen Poncar Date/Time 7/16/00 200
Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____
Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95509	Date Taken:	04/05/00
Sample Description:	GP-13 6-7.5'	Time Taken:	12:58
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Solids, Total	78.45	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95509	Date Taken:	04/05/00
Sample Description:	GP-13 6-7.5'	Time Taken:	12:58
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Styrene	< 5.0	ug/kg	
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/10/00
Analysis Date: 04/12/00

Acenaphthene	115,000	ug/kg
Acenaphthylene	< 3,300	ug/kg
Anthracene	350,000	ug/kg
Benzidine	< 3,300	ug/kg
Benzo[a]anthracene	302,000	ug/kg
Benzo[b]fluoranthene	22,700	ug/kg
Benzo[k]fluoranthene	156,000	ug/kg
Benzo[g,h,i]perylene	106,000	ug/kg
Benzo[a]pyrene	223,000	ug/kg
Benzoic Acid	< 3,300	ug/kg
Benzyl alcohol	< 3,300	ug/kg
bis(2-Chloroethoxy)methane	< 3,300	ug/kg
bis(2-Chloroethyl)ether	< 3,300	ug/kg
bis(2-chloroisopropyl)ether	< 3,300	ug/kg
bis(2-Ethylhexyl)phthalate	< 3,300	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95509	Date Taken:	04/05/00
Sample Description:	GP-13 6-7.5'	Time Taken:	12:58
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
4-Bromophenyl-phenylether	< 3,300	ug/kg	
Butylbenzylphthalate	< 3,300	ug/kg	
4-Chloroaniline	< 3,300	ug/kg	
4-Chloro-3-methylphenol	< 3,300	ug/kg	
2-Chloronaphthalene	< 3,300	ug/kg	
2-Chlorophenol	< 3,300	ug/kg	
4-Chlorophenyl-phenylether	< 3,300	ug/kg	
Chrysene	271,000	ug/kg	
Dibenz[a,h]anthracene	46,000	ug/kg	
Dibenzofuran	140,000	ug/kg	
1,2-Dichlorobenzene	< 3,300	ug/kg	
1,3-Dichlorobenzene	< 3,300	ug/kg	
1,4-Dichlorobenzene	< 3,300	ug/kg	
3,3'-Dichlorobenzidine	< 6,600	ug/kg	
2,4-Dichlorophenol	< 3,300	ug/kg	
Diethylphthalate	< 3,300	ug/kg	
2,4-Dimethylphenol	< 3,300	ug/kg	
Dimethylphthalate	< 3,300	ug/kg	
Di-n-butylphthalate	< 3,300	ug/kg	
4,6-Dinitro-2-methylphenol	< 16,000	ug/kg	
2,4-Dinitrophenol	< 16,000	ug/kg	
2,4-Dinitrotoluene	< 3,300	ug/kg	
2,6-Dinitrotoluene	< 3,300	ug/kg	
Di-n-octylphthalate	< 3,300	ug/kg	
Fluoranthene	954,000	ug/kg	
Fluorene	179,000	ug/kg	
Hexachlorobenzene	< 3,300	ug/kg	
Hexachlorobutadiene	< 3,300	ug/kg	
Hexachlorocyclopentadiene	< 3,300	ug/kg	
Hexachloroethane	< 3,300	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95509	Date Taken:	04/05/00
Sample Description:	GP-13 6-7.5'	Time Taken:	12:58
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Indeno[1,2,3-cd]pyrene	131,000	ug/kg	
Isophorone	< 3,300	ug/kg	
2-Methylnaphthalene	47,500	ug/kg	
2-Methylphenol	< 3,300	ug/kg	
3&4-Methylphenol	< 3,300	ug/kg	
Naphthalene	212,000	ug/kg	
2-Nitroaniline	< 16,000	ug/kg	
3-Nitroaniline	< 16,000	ug/kg	
4-Nitroaniline	< 16,000	ug/kg	
Nitrobenzene	< 3,300	ug/kg	
2-Nitrophenol	< 16,000	ug/kg	
4-Nitrophenol	< 16,000	ug/kg	
N-Nitrosodimethylamine	< 3,300	ug/kg	
N-Nitroso-di-n-propylamine	< 3,300	ug/kg	
n-Nitrosodiphenylamine	< 3,300	ug/kg	
Pentachlorophenol	< 16,000	ug/kg	
Phenanthrene	1,170,000	ug/kg	
Phenol	< 3,300	ug/kg	
Pyrene	607,000	ug/kg	
1,2,4-Trichlorobenzene	< 3,300	ug/kg	
2,4,5-Trichlorophenol	< 6,600	ug/kg	
2,4,6-Trichlorophenol	< 3,300	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95509	Date Taken:	04/05/00
Sample Description:	GP-13 6-7.5'	Time Taken:	12:58
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/11/00

Date Analyzed: 04/13/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/06/00
Sample Number:	95509	Date Taken:	04/05/00
Sample Description:	GP-13 6-7.5'	Time Taken:	12:58
Lab File ID:	95506-12	Date Reported:	04/13/00

Analyte	Result	Units	Date Analyzed	Method
Cyanide	1.25	mg/kg	04/07/00	9010B/9014
pH @ 25°C, (1:10)	8.83	units	04/07/00	9045C
Aluminum	6,780	mg/kg	04/12/00	3050B/6010B
Antimony	2.1	mg/kg	04/12/00	3050B/6010B
Arsenic	11.7	mg/kg	04/12/00	3050B/6010B
Barium	143	mg/kg	04/12/00	3050B/6010B
Beryllium	0.8	mg/kg	04/12/00	3050B/6010B
Cadmium	2.7	mg/kg	04/12/00	3050B/6010B
Calcium	74,400	mg/kg	04/12/00	3050B/6010B
Chromium	16.5	mg/kg	04/12/00	3050B/6010B
Cobalt	9.8	mg/kg	04/12/00	3050B/6010B
Copper	368	mg/kg	04/12/00	3050B/6010B
Iron	26,200	mg/kg	04/12/00	3050B/6010B
Lead	534	mg/kg	04/12/00	3050B/6010B
Magnesium	25,000	mg/kg	04/12/00	3050B/6010B
Manganese	651	mg/kg	04/12/00	3050B/6010B
Mercury	2.00	mg/kg	04/12/00	7470A
Nickel	26.4	mg/kg	04/12/00	3050B/6010B
Potassium	1,180	mg/kg	04/12/00	3050B/6010B
Selenium	<0.2	mg/kg	04/12/00	3050B/6010B
Silver	0.6	mg/kg	04/12/00	3050B/6010B
Sodium	599	mg/kg	04/12/00	3050B/6010B
Thallium	<1.0	mg/kg	04/12/00	3050B/6010B
Vanadium	26.3	mg/kg	04/12/00	3050B/6010B
Zinc	357	mg/kg	04/12/00	3050B/6010B



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ALL FACTOR RECORDS

COMPANY NAME Gatatech Inc
ADDRESS 1 North Franklin, Suite 2500, Chicago, IL
PHONE 312 541 4200 FAX: 541-0340
CONTACT NAME Larry Bertch
SAMPLED BY Larry Bertch

ANALYSES

Matrix Codes: S = Soil W = Water O = Other

Preserved in: Lab Field

Cooler Temperature: 6 °C

Notes and Special Instructions:

Relinquished By:

Date/Time

Date/Time

Date/Time

Received By: Helen Farrelle Date/Tim

Received By: _____ Date/Tim

Received By: _____ Date/Tim

Relinquished By

Date/Time

Received By: _____ Date/Tim

Relinquished By:

Date/Time

Received By: _____ Date/Tim



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95354	Date Taken:	04/05/00
Sample Description:	GP-7	Time Taken:	9:55
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3510C/8081A/8082

Preparation Date: 04/06/00

Analysis Date: 04/11/00

Aldrin	< 0.05	ug/L
Aroclor 1016	< 0.5	ug/L
Aroclor 1221	< 0.5	ug/L
Aroclor 1232	< 0.5	ug/L
Aroclor 1242	< 0.5	ug/L
Aroclor 1248	< 0.5	ug/L
Aroclor 1254	< 1	ug/L
Aroclor 1260	< 1	ug/L
alpha-BHC	< 0.05	ug/L
beta-BHC	< 0.05	ug/L
delta-BHC	< 0.05	ug/L
Lindane (gamma-BHC)	< 0.05	ug/L
alpha-Chlordane	< 0.5	ug/L
gamma-Chlordane	< 0.5	ug/L
4,4'-DDD	< 0.1	ug/L
4,4'-DDE	< 0.1	ug/L
4,4-DDT	< 0.1	ug/L
Dieldrin	< 0.1	ug/L
Endosulfan I	< 0.05	ug/L
Endosulfan II	< 0.1	ug/L
Endosulfan sulfate	< 0.1	ug/L
Endrin	< 0.1	ug/L
Endrin aldehyde	< 0.1	ug/L
Endrin ketone	< 0.1	ug/L
Heptachlor	< 0.05	ug/L
Heptachlor epoxide	< 0.05	ug/L
Methoxychlor	< 0.5	ug/L
Toxaphene	< 1	ug/L



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April 25, 2000

Mr. Larry Bertsch
GAIATECH INC.
1 North Franklin, Suite 2500
Chicago, IL 60606

Project ID: 4917-410-0
First Environmental File ID: 96233-35
Date Received: April 5, 2000

Dear Mr. Bertsch

The above referenced samples were analyzed as per your request on April 17th, 2000 and April 24th, 2000 as documented on the enclosed chain of custody.

All analyses were performed in accordance with methods from the USEPA publication Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition, December 1996. The actual method references are listed on the Analytical Report.

All analyses were performed within established holding times, and all Quality Control criteria as outlined in the methods have been met. QA/QC documentation and raw data will remain on file for future reference.

It has been a pleasure providing you with analytical services, and we look forward to working with you again in the future. If you have any questions regarding this report, or need additional information, please contact me at (630) 778-1200.

Sincerely,

Stan Zaworski
Project Manager



**First
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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Relogged:	04/17/00
Sample Number:	96233	Date Taken:	04/04/00
Sample Description:	GP-2; 2-3'	Time Taken:	1010
Lab File ID:	96233-35	Date Reported:	04/25/00

Relog of #95358

-	Analyte	Result	Units	Date Analyzed	Method
	TCLP Arsenic	0.003	mg/L	04/21/00	6010B
	TCLP Beryllium	<0.001	mg/L	04/21/00	6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Relogged:	04/17/00
Sample Number:	96234	Date Taken:	04/04/00
Sample Description:	GP-3; 6-8'	Time Taken:	1115
Lab File ID:	96233-35	Date Reported:	04/25/00

Relog of #95359

Analyte	Result	Units	Date Analyzed	Method
TCLP Lead	0.123	mg/L	04/21/00	6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Relogged:	04/17/00
Sample Number:	96235	Date Taken:	04/05/00
Sample Description:	GP-16; 1-3'	Time Taken:	1540
Lab File ID:	96233-35	Date Reported:	04/25/00

Relog of #95512

Analyte	Result	Units	Date Analyzed	Method
TCLP Arsenic	0.125	mg/L	04/21/00	6010B
TCLP Copper	1.93	mg/L	04/21/00	6010B

CHAIN OF CUSTODY RECORD



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COMPANY NAME: Galatech INC
 ADDRESS: 1 NORTH Franklin, Suite 2500, Chicago, IL
 PHONE: 312-541-4200 FAX: 541-0340
 CONTACT NAME Larry Bertsch
 SAMPLED BY: Larry Bertsch

DATE/TIME TAKEN	SAMPLE DESCRIPTION	ANALYSES						LAB ID
		MATRIX	TAL	TCL	TLP RS	TLP Pb	Other	
4/4/00 9:45	Gp-1 1-3'	S	✓	✓				95251
10:10	Gp-1 Gp-2 2-3'	I	✓	✓	X			96233
10:30	Gp-2 6-8'							HOLD
11:10	Gp-3 2-3							HOLD
11:15	Gp-3 6-8		✓	✓	MAN	X		96234
12:25	Gp-4 1-3							HOLD
12:40	Gp-4 6-8 8-10'		✓	✓				95360
13:45	Gp-5 2-3		✓	✓				3611
14:00	Gp-6 2-3'							HOLD
14:50	Gp-6 9-10'		✓	✓				95362
15:30	Gp-7 1-3'		✓	✓				362
14:00	Gp-7 6-8'		✓	✓				HOLD
15:00	Gp-8 1-3+	S	✓	✓				
15:10	Gp-8 8-10'							HOLD

Matrix Codes: S = Soil W = Water O = Other

Tris Bleach ^(U)
 Preserved in: Lab Field

Cooler Temperature: 3.4 °C

95365

Notes and Special Instructions:

Relinquished By: Larry Bertsch Date/Time 4/5/00 Received By: Helen Donack Date/Time 4/5/00 1:20
 Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____
 Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____



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CHAIN OF CUSTODY RECORD

COMPANY NAME: Watatech INC.
ADDRESS: 1 North Franklin, Suite 2500, Chicago, IL
PHONE: 312-541-4200 FAX: 312-541-0310
CONTACT NAME Larry Bertsch
SAMPLED BY: John R. Smith

Matrix Codes: S = Soil W = Water O = Other

Preserved in: Lab Field Cooler Temperature: 6 °C

Notes and Special Instructions: _____

Relinquished By: Jane Bent Date/Time 5/16/00 Received By: Helen French Date/Time 5/16/00 2000
Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____
Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____



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April 12, 2000

Mr. Larry Bertsch
GAIATECH INC.
1 North Franklin, Suite 2500
Chicago, IL 60606

Project ID: 4917-410-0
First Environmental File ID: 95357-65
Date Received: April 5th, 2000

Dear Mr. Bertsch:

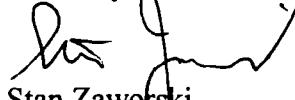
These samples were analyzed as directed on the enclosed chain of custody.

All analyses were performed in accordance with methods from the USEPA publication Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition, December 1996. The actual method references are listed on the Analytical Report. Results have been expressed on a dry weight basis per method protocol. You will note elevated reporting limits due to matrix interferences.

All analyses were performed within established holding times, and all Quality Control criteria as outlined in the methods have been met. QA/QC documentation and raw data will remain on file for future reference.

It has been a pleasure providing you with analytical services, and we look forward to working with you again in the future. If you have any questions regarding this report, or need additional information, please contact me at (630) 778-1200.

Sincerely,


Stan Zaworski
Project Manager



**First
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IEPA Certification #100292

Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95357	Date Taken:	04/04/00
Sample Description:	GP-1; 1-3'	Time Taken:	9:45
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
Solids, Total	88.08	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95357	Date Taken:	04/04/00
Sample Description:	GP-1; 1-3'	Time Taken:	9:45
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/06/00

Analysis Date: 04/10/00

Acenaphthene	44,300	ug/kg
Acenaphthylene	< 990	ug/kg
Anthracene	82,700	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	79,900	ug/kg
Benzo[b]fluoranthene	83,000	ug/kg
Benzo[k]fluoranthene	30,600	ug/kg
Benzo[g,h,i]perylene	30,300	ug/kg
Benzo[a]pyrene	72,100	ug/kg
Benzoic Acid	< 990	ug/kg
Benzyl alcohol	< 990	ug/kg
bis(2-Chloroethoxy)methane	< 990	ug/kg
bis(2-Chloroethyl)ether	< 990	ug/kg
bis(2-chloroisopropyl)ether	< 990	ug/kg
bis(2-Ethylhexyl)phthalate	< 990	ug/kg
4-Bromophenyl-phenylether	< 990	ug/kg
Butylbenzylphthalate	< 990	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95357	Date Taken:	04/04/00
Sample Description:	GP-1; 1-3'	Time Taken:	9:45
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 990	ug/kg	
4-Chloro-3-methylphenol	< 990	ug/kg	
2-Choronaphthalene	< 990	ug/kg	
2-Chlorophenol	< 990	ug/kg	
4-Chlorophenyl-phenylether	< 990	ug/kg	
Chrysene	72,700	ug/kg	
Dibenz[a,h]anthracene	11,600	ug/kg	
Dibenzofuran	29,300	ug/kg	
1,2-Dichlorobenzene	< 990	ug/kg	
1,3-Dichlorobenzene	< 990	ug/kg	
1,4-Dichlorobenzene	< 990	ug/kg	
3,3'-Dichlorobenzidine	< 1,980	ug/kg	
2,4-Dichlorophenol	< 990	ug/kg	
Diethylphthalate	< 990	ug/kg	
2,4-Dimethylphenol	< 990	ug/kg	
Dimethylphthalate	< 990	ug/kg	
Di-n-butylphthalate	< 990	ug/kg	
4,6-Dinitro-2-methylphenol	< 990	ug/kg	
2,4-Dinitrophenol	< 990	ug/kg	
2,4-Dinitrotoluene	< 990	ug/kg	
2,6-Dinitrotoluene	< 990	ug/kg	
Di-n-octylphthalate	< 990	ug/kg	
Fluoranthene	218,000	ug/kg	
Fluorene	44,700	ug/kg	
Hexachlorobenzene	< 990	ug/kg	
Hexachlorobutadiene	< 990	ug/kg	
Hexachlorocyclopentadiene	< 990	ug/kg	
Hexachloroethane	< 990	ug/kg	
Indeno[1,2,3-cd]pyrene	33,100	ug/kg	
Isophorone	< 990	ug/kg	
2-Methylnaphthalene	5,730	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95357	Date Taken:	04/04/00
Sample Description:	GP-1; 1-3'	Time Taken:	9:45
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
2-Methylphenol	< 990	ug/kg	
3&4-Methylphenol	< 990	ug/kg	
Naphthalene	7,920	ug/kg	
2-Nitroaniline	< 4,800	ug/kg	
3-Nitroaniline	< 4,800	ug/kg	
4-Nitroaniline	< 4,800	ug/kg	
Nitrobenzene	< 990	ug/kg	
2-Nitrophenol	< 4,800	ug/kg	
4-Nitrophenol	< 4,800	ug/kg	
N-Nitrosodimethylamine	< 990	ug/kg	
N-Nitroso-di-n-propylamine	< 990	ug/kg	
n-Nitrosodiphenylamine	< 990	ug/kg	
Pentachlorophenol	< 4,800	ug/kg	
Phenanthrene	264,000	ug/kg	
Phenol	< 990	ug/kg	
Pyrene	163,000	ug/kg	
1,2,4-Trichlorobenzene	< 990	ug/kg	
2,4,5-Trichlorophenol	< 1,980	ug/kg	
2,4,6-Trichlorophenol	< 990	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95357	Date Taken:	04/04/00
Sample Description:	GP-1; 1-3'	Time Taken:	9:45
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/06/00

Date Analyzed: 04/11/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95357	Date Taken:	04/04/00
Sample Description:	GP-1; 1-3'	Time Taken:	9:45
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Date Analyzed	Method
Cyanide	0.14	mg/kg	04/06/00	9010B/9014
Aluminum	6,950	mg/kg	04/07/00	3050B/6010B
Antimony	<1.0	mg/kg	04/07/00	3050B/6010B
Arsenic	5.6	mg/kg	04/07/00	3050B/6010B
Barium	48.9	mg/kg	04/07/00	3050B/6010B
Beryllium	0.5	mg/kg	04/07/00	3050B/6010B
Cadmium	1.4	mg/kg	04/07/00	3050B/6010B
Calcium	66,600	mg/kg	04/07/00	3050B/6010B
Chromium	13.7	mg/kg	04/07/00	3050B/6010B
Cobalt	8.0	mg/kg	04/07/00	3050B/6010B
Copper	29.8	mg/kg	04/07/00	3050B/6010B
Iron	15,000	mg/kg	04/07/00	3050B/6010B
Lead	51.4	mg/kg	04/07/00	3050B/6010B
Magnesium	31,100	mg/kg	04/07/00	3050B/6010B
Manganese	346	mg/kg	04/07/00	3050B/6010B
Mercury	<0.05	mg/kg	04/07/00	7470A
Nickel	23.2	mg/kg	04/07/00	3050B/6010B
Potassium	1,730	mg/kg	04/07/00	3050B/6010B
Selenium	<0.2	mg/kg	04/07/00	3050B/6010B
Silver	<0.1	mg/kg	04/07/00	3050B/6010B
Sodium	663	mg/kg	04/07/00	3050B/6010B
Thallium	<1.0	mg/kg	04/07/00	3050B/6010B
Vanadium	16.5	mg/kg	04/07/00	3050B/6010B
Zinc	70.2	mg/kg	04/07/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95358	Date Taken:	04/04/00
Sample Description:	GP-2; 2-3'	Time Taken:	10:10
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
Solids, Total	83.98	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/10/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95358	Date Taken:	04/04/00
Sample Description:	GP-2; 2-3'	Time Taken:	10:10
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/06/00
Analysis Date: 04/10/00

Acenaphthene	< 330	ug/kg
Acenaphthylene	< 330	ug/kg
Anthracene	< 330	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	< 330	ug/kg
Benzo[b]fluoranthene	< 330	ug/kg
Benzo[k]fluoranthene	< 330	ug/kg
Benzo[g,h,i]perylene	< 330	ug/kg
Benzo[a]pyrene	< 330	ug/kg
Benzoic Acid	< 330	ug/kg
Benzyl alcohol	< 330	ug/kg
bis(2-Chloroethoxy)methane	< 330	ug/kg
bis(2-Chloroethyl)ether	< 330	ug/kg
bis(2-chloroisopropyl)ether	< 330	ug/kg
bis(2-Ethylhexyl)phthalate	< 330	ug/kg
4-Bromophenyl-phenylether	< 330	ug/kg
Butylbenzylphthalate	< 330	ug/kg



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Analytical Report

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Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95358	Date Taken:	04/04/00
Sample Description:	GP-2; 2-3'	Time Taken:	10:10
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 330	ug/kg	
4-Chloro-3-methylphenol	< 330	ug/kg	
2-Chloronaphthalene	< 330	ug/kg	
2-Chlorophenol	< 330	ug/kg	
4-Chlorophenyl-phenylether	< 330	ug/kg	
Chrysene	642	ug/kg	
Dibenz[a,h]anthracene	< 330	ug/kg	
Dibenzofuran	< 330	ug/kg	
1,2-Dichlorobenzene	< 330	ug/kg	
1,3-Dichlorobenzene	< 330	ug/kg	
1,4-Dichlorobenzene	< 330	ug/kg	
3,3'-Dichlorobenzidine	< 660	ug/kg	
2,4-Dichlorophenol	< 330	ug/kg	
Diethylphthalate	< 330	ug/kg	
2,4-Dimethylphenol	< 330	ug/kg	
Dimethylphthalate	< 330	ug/kg	
Di-n-butylphthalate	< 330	ug/kg	
4,6-Dinitro-2-methylphenol	< 1,600	ug/kg	
2,4-Dinitrophenol	< 1,600	ug/kg	
2,4-Dinitrotoluene	< 330	ug/kg	
2,6-Dinitrotoluene	< 330	ug/kg	
Di-n-octylphthalate	< 330	ug/kg	
Fluoranthene	< 330	ug/kg	
Fluorene	< 330	ug/kg	
Hexachlorobenzene	< 330	ug/kg	
Hexachlorobutadiene	< 330	ug/kg	
Hexachlorocyclopentadiene	< 330	ug/kg	
Hexachloroethane	< 330	ug/kg	
Indeno[1,2,3-cd]pyrene	< 330	ug/kg	
Isophorone	< 330	ug/kg	
2-Methylnaphthalene	938	ug/kg	



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Analytical Report

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Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95358	Date Taken:	04/04/00
Sample Description:	GP-2; 2-3'	Time Taken:	10:10
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
2-Methylphenol	< 330	ug/kg	
3&4-Methylphenol	< 330	ug/kg	
Naphthalene	< 330	ug/kg	
2-Nitroaniline	< 1,600	ug/kg	
3-Nitroaniline	< 1,600	ug/kg	
4-Nitroaniline	< 1,600	ug/kg	
Nitrobenzene	< 330	ug/kg	
2-Nitrophenol	< 1,600	ug/kg	
4-Nitrophenol	< 1,600	ug/kg	
N-Nitrosodimethylamine	< 330	ug/kg	
N-Nitroso-di-n-propylamine	< 330	ug/kg	
n-Nitrosodiphenylamine	< 330	ug/kg	
Pentachlorophenol	< 1,600	ug/kg	
Phenanthrene	1,520	ug/kg	
Phenol	< 330	ug/kg	
Pyrene	< 330	ug/kg	
1,2,4-Trichlorobenzene	< 330	ug/kg	
2,4,5-Trichlorophenol	< 660	ug/kg	
2,4,6-Trichlorophenol	< 330	ug/kg	



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Analytical Report

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Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95358	Date Taken:	04/04/00
Sample Description:	GP-2; 2-3'	Time Taken:	10:10
Lab File ID:	95357-65	Date Reported:	04/12/00

. Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/06/00

Date Analyzed: 04/11/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.			
Project ID:	4917-410-0	Date Received:	04/05/00	
Sample Number:	95358	Date Taken:	04/04/00	
Sample Description:	GP-2; 2-3'	Time Taken:	10:10	
Lab File ID:	95357-65	Date Reported:	04/12/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	0.21	mg/kg	04/06/00	9010B/9014
Aluminum	5,250	mg/kg	04/07/00	3050B/6010B
Antimony	2.5	mg/kg	04/07/00	3050B/6010B
Arsenic	32.8	mg/kg	04/07/00	3050B/6010B
Barium	1,030	mg/kg	04/07/00	3050B/6010B
Beryllium	1.3	mg/kg	04/07/00	3050B/6010B
Cadmium	2.5	mg/kg	04/07/00	3050B/6010B
Calcium	11,500	mg/kg	04/07/00	3050B/6010B
Chromium	11.1	mg/kg	04/07/00	3050B/6010B
Cobalt	12.3	mg/kg	04/07/00	3050B/6010B
Copper	230	mg/kg	04/07/00	3050B/6010B
Iron	30,500	mg/kg	04/07/00	3050B/6010B
Lead	170	mg/kg	04/07/00	3050B/6010B
Magnesium	2,810	mg/kg	04/07/00	3050B/6010B
Manganese	166	mg/kg	04/07/00	3050B/6010B
Mercury	0.91	mg/kg	04/07/00	7470A
Nickel	36.6	mg/kg	04/07/00	3050B/6010B
Potassium	823	mg/kg	04/07/00	3050B/6010B
Selenium	<0.2	mg/kg	04/07/00	3050B/6010B
Silver	<0.1	mg/kg	04/07/00	3050B/6010B
Sodium	430	mg/kg	04/07/00	3050B/6010B
Thallium	<1.0	mg/kg	04/07/00	3050B/6010B
Vanadium	27.9	mg/kg	04/07/00	3050B/6010B
Zinc	190	mg/kg	04/07/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95359	Date Taken:	04/04/00
Sample Description:	GP-3; 6-8'	Time Taken:	10:10
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
Solids, Total	57.23	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/10/00

Acetone	201	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	77.3	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95359	Date Taken:	04/04/00
Sample Description:	GP-3; 6-8'	Time Taken:	10:10
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/06/00

Analysis Date: 04/07/00

Acenaphthene	2,280	ug/kg
Acenaphthylene	358	ug/kg
Anthracene	5,460	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	11,900	ug/kg
Benzo[b]fluoranthene	16,000	ug/kg
Benzo[k]fluoranthene	18,300	ug/kg
Benzo[g,h,i]perylene	5,000	ug/kg
Benzo[a]pyrene	13,500	ug/kg
Benzoic Acid	< 330	ug/kg
Benzyl alcohol	< 330	ug/kg
bis(2-Chloroethoxy)methane	< 330	ug/kg
bis(2-Chloroethyl)ether	< 330	ug/kg
bis(2-chloroisopropyl)ether	< 330	ug/kg
bis(2-Ethylhexyl)phthalate	< 330	ug/kg
4-Bromophenyl-phenylether	< 330	ug/kg
Butylbenzylphthalate	< 330	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95359	Date Taken:	04/04/00
Sample Description:	GP-3; 6-8'	Time Taken:	10:10
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 330	ug/kg	
4-Chloro-3-methylphenol	< 330	ug/kg	
2-Chloronaphthalene	< 330	ug/kg	
2-Chlorophenol	< 330	ug/kg	
4-Chlorophenyl-phenylether	< 330	ug/kg	
Chrysene	11,500	ug/kg	
Dibenz[a,h]anthracene	1,360	ug/kg	
Dibenzofuran	2,190	ug/kg	
1,2-Dichlorobenzene	< 330	ug/kg	
1,3-Dichlorobenzene	< 330	ug/kg	
1,4-Dichlorobenzene	< 330	ug/kg	
3,3'-Dichlorobenzidine	< 660	ug/kg	
2,4-Dichlorophenol	< 330	ug/kg	
Diethylphthalate	< 330	ug/kg	
2,4-Dimethylphenol	< 330	ug/kg	
Dimethylphthalate	< 330	ug/kg	
Di-n-butylphthalate	< 330	ug/kg	
4,6-Dinitro-2-methylphenol	< 1,600	ug/kg	
2,4-Dinitrophenol	< 1,600	ug/kg	
2,4-Dinitrotoluene	< 330	ug/kg	
2,6-Dinitrotoluene	< 330	ug/kg	
Di-n-octylphthalate	< 330	ug/kg	
Fluoranthene	22,500	ug/kg	
Fluorene	3,370	ug/kg	
Hexachlorobenzene	< 330	ug/kg	
Hexachlorobutadiene	< 330	ug/kg	
Hexachlorocyclopentadiene	< 330	ug/kg	
Hexachloroethane	< 330	ug/kg	
Indeno[1,2,3-cd]pyrene	4,690	ug/kg	
Isophorone	< 330	ug/kg	
2-Methylnaphthalene	3,060	ug/kg	



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Analytical Report

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Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95359	Date Taken:	04/04/00
Sample Description:	GP-3; 6-8'	Time Taken:	10:10
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
2-Methylphenol	< 330	ug/kg	
3&4-Methylphenol	16,800	ug/kg	
Naphthalene	8,900	ug/kg	
2-Nitroaniline	< 1,600	ug/kg	
3-Nitroaniline	< 1,600	ug/kg	
4-Nitroaniline	< 1,600	ug/kg	
Nitrobenzene	< 330	ug/kg	
2-Nitrophenol	< 1,600	ug/kg	
4-Nitrophenol	< 1,600	ug/kg	
N-Nitrosodimethylamine	< 330	ug/kg	
N-Nitroso-di-n-propylamine	< 330	ug/kg	
n-Nitrosodiphenylamine	< 330	ug/kg	
Pentachlorophenol	< 1,600	ug/kg	
Phenanthrene	21,100	ug/kg	
Phenol	935	ug/kg	
Pyrene	28,000	ug/kg	
1,2,4-Trichlorobenzene	< 330	ug/kg	
2,4,5-Trichlorophenol	< 660	ug/kg	
2,4,6-Trichlorophenol	< 330	ug/kg	



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IEPA Certification #100292

Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95359	Date Taken:	04/04/00
Sample Description:	GP-3; 6-8'	Time Taken:	10:10
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/06/00
Date Analyzed: 04/11/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.			
Project ID:	4917-410-0	Date Received:	04/05/00	
Sample Number:	95359	Date Taken:	04/04/00	
Sample Description:	GP-3; 6-8'	Time Taken:	11:15	
Lab File ID:	95357-65	Date Reported:	04/12/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.10	mg/kg	04/07/00	9010B/9014
Aluminum	4,770	mg/kg	04/07/00	3050B/6010B
Antimony	4.2	mg/kg	04/07/00	3050B/6010B
Arsenic	16.1	mg/kg	04/07/00	3050B/6010B
Barium	134	mg/kg	04/07/00	3050B/6010B
Beryllium	0.8	mg/kg	04/07/00	3050B/6010B
Cadmium	4.6	mg/kg	04/07/00	3050B/6010B
Calcium	40,400	mg/kg	04/07/00	3050B/6010B
Chromium	13.8	mg/kg	04/07/00	3050B/6010B
Cobalt	7.4	mg/kg	04/07/00	3050B/6010B
Copper	237	mg/kg	04/07/00	3050B/6010B
Iron	29,600	mg/kg	04/07/00	3050B/6010B
Lead	1,110	mg/kg	04/07/00	3050B/6010B
Magnesium	20,200	mg/kg	04/07/00	3050B/6010B
Manganese	371	mg/kg	04/07/00	3050B/6010B
Mercury	0.62	mg/kg	04/07/00	7470A
Nickel	20.6	mg/kg	04/07/00	3050B/6010B
Potassium	1,000	mg/kg	04/07/00	3050B/6010B
Selenium	<0.2	mg/kg	04/07/00	3050B/6010B
Silver	0.5	mg/kg	04/07/00	3050B/6010B
Sodium	952	mg/kg	04/07/00	3050B/6010B
Thallium	<1.0	mg/kg	04/07/00	3050B/6010B
Vanadium	21.2	mg/kg	04/07/00	3050B/6010B
Zinc	742	mg/kg	04/07/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95360	Date Taken:	04/04/00
Sample Description:	GP-4; 8-10'	Time Taken:	12:40
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
Solids, Total	83.75	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/10/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95360	Date Taken:	04/04/00
Sample Description:	GP-4; 8-10'	Time Taken:	12:40
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/06/00

Analysis Date: 04/07/00

Acenaphthene	< 330	ug/kg
Acenaphthylene	< 330	ug/kg
Anthracene	1,260	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	1,940	ug/kg
Benzo[b]fluoranthene	2,160	ug/kg
Benzo[k]fluoranthene	998	ug/kg
Benzo[g,h,i]perylene	514	ug/kg
Benzo[a]pyrene	1,790	ug/kg
Benzoic Acid	< 330	ug/kg
Benzyl alcohol	< 330	ug/kg
bis(2-Chloroethoxy)methane	< 330	ug/kg
bis(2-Chloroethyl)ether	< 330	ug/kg
bis(2-chloroisopropyl)ether	< 330	ug/kg
bis(2-Ethylhexyl)phthalate	< 330	ug/kg
4-Bromophenyl-phenylether	< 330	ug/kg
Butylbenzylphthalate	< 330	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95360	Date Taken:	04/04/00
Sample Description:	GP-4; 8-10'	Time Taken:	12:40
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 330	ug/kg	
4-Chloro-3-methylphenol	< 330	ug/kg	
2-Chloronaphthalene	< 330	ug/kg	
2-Chlorophenol	< 330	ug/kg	
4-Chlorophenyl-phenylether	< 330	ug/kg	
Chrysene	1,770	ug/kg	
Dibenz[a,h]anthracene	< 330	ug/kg	
Dibenzofuran	< 330	ug/kg	
1,2-Dichlorobenzene	< 330	ug/kg	
1,3-Dichlorobenzene	< 330	ug/kg	
1,4-Dichlorobenzene	< 330	ug/kg	
3,3'-Dichlorobenzidine	< 660	ug/kg	
2,4-Dichlorophenol	< 330	ug/kg	
Diethylphthalate	< 330	ug/kg	
2,4-Dimethylphenol	< 330	ug/kg	
Dimethylphthalate	< 330	ug/kg	
Di-n-butylphthalate	< 330	ug/kg	
4,6-Dinitro-2-methylphenol	< 1,600	ug/kg	
2,4-Dinitrophenol	< 1,600	ug/kg	
2,4-Dinitrotoluene	< 330	ug/kg	
2,6-Dinitrotoluene	< 330	ug/kg	
Di-n-octylphthalate	< 330	ug/kg	
Fluoranthene	5,390	ug/kg	
Fluorene	333	ug/kg	
Hexachlorobenzene	< 330	ug/kg	
Hexachlorobutadiene	< 330	ug/kg	
Hexachlorocyclopentadiene	< 330	ug/kg	
Hexachloroethane	< 330	ug/kg	
Indeno[1,2,3-cd]pyrene	617	ug/kg	
Isophorone	< 330	ug/kg	
2-Methylnaphthalene	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95360	Date Taken:	04/04/00
Sample Description:	GP-4; 8-10'	Time Taken:	12:40
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
2-Methylphenol	< 330	ug/kg	
3&4-Methylphenol	< 330	ug/kg	
Naphthalene	< 330	ug/kg	
2-Nitroaniline	< 1,600	ug/kg	
3-Nitroaniline	< 1,600	ug/kg	
4-Nitroaniline	< 1,600	ug/kg	
Nitrobenzene	< 330	ug/kg	
2-Nitrophenol	< 1,600	ug/kg	
4-Nitrophenol	< 1,600	ug/kg	
N-Nitrosodimethylamine	< 330	ug/kg	
N-Nitroso-di-n-propylamine	< 330	ug/kg	
n-Nitrosodiphenylamine	< 330	ug/kg	
Pentachlorophenol	< 1,600	ug/kg	
Phenanthrene	4,000	ug/kg	
Phenol	< 330	ug/kg	
Pyrene	4,350	ug/kg	
1,2,4-Trichlorobenzene	< 330	ug/kg	
2,4,5-Trichlorophenol	< 660	ug/kg	
2,4,6-Trichlorophenol	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95360	Date Taken:	04/04/00
Sample Description:	GP-4; 8-10'	Time Taken:	12:40
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/06/00

Date Analyzed: 04/11/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95360	Date Taken:	04/04/00
Sample Description:	GP-4; 8-10'	Time Taken:	12:40
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.10	mg/kg	04/06/00	9010B/9014
Aluminum	9,960	mg/kg	04/07/00	3050B/6010B
Antimony	1.2	mg/kg	04/07/00	3050B/6010B
Arsenic	7.8	mg/kg	04/07/00	3050B/6010B
Barium	43.4	mg/kg	04/07/00	3050B/6010B
Beryllium	0.6	mg/kg	04/07/00	3050B/6010B
Cadmium	1.8	mg/kg	04/07/00	3050B/6010B
Calcium	58,700	mg/kg	04/07/00	3050B/6010B
Chromium	16.7	mg/kg	04/07/00	3050B/6010B
Cobalt	12.3	mg/kg	04/07/00	3050B/6010B
Copper	32.9	mg/kg	04/07/00	3050B/6010B
Iron	21,600	mg/kg	04/07/00	3050B/6010B
Lead	19.5	mg/kg	04/07/00	3050B/6010B
Magnesium	28,800	mg/kg	04/07/00	3050B/6010B
Manganese	416	mg/kg	04/07/00	3050B/6010B
Mercury	<0.05	mg/kg	04/07/00	7470A
Nickel	32.0	mg/kg	04/07/00	3050B/6010B
Potassium	2,520	mg/kg	04/07/00	3050B/6010B
Selenium	<0.2	mg/kg	04/07/00	3050B/6010B
Silver	<0.1	mg/kg	04/07/00	3050B/6010B
Sodium	488	mg/kg	04/07/00	3050B/6010B
Thallium	<1.0	mg/kg	04/07/00	3050B/6010B
Vanadium	20.3	mg/kg	04/07/00	3050B/6010B
Zinc	54.0	mg/kg	04/07/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95361	Date Taken:	04/04/00
Sample Description:	GP-5; 2-3'	Time Taken:	13:45
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
Solids, Total	88.93	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/10/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95361	Date Taken:	04/04/00
Sample Description:	GP-5; 2-3'	Time Taken:	13:45
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/06/00
Analysis Date: 04/07/00

Acenaphthene	6,490	ug/kg
Acenaphthylene	< 330	ug/kg
Anthracene	3,840	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	2,500	ug/kg
Benzo[b]fluoranthene	2,480	ug/kg
Benzo[k]fluoranthene	1,610	ug/kg
Benzo[g,h,i]perylene	444	ug/kg
Benzo[a]pyrene	1,920	ug/kg
Benzoic Acid	< 330	ug/kg
Benzyl alcohol	< 330	ug/kg
bis(2-Chloroethoxy)methane	< 330	ug/kg
bis(2-Chloroethyl)ether	< 330	ug/kg
bis(2-chloroisopropyl)ether	< 330	ug/kg
bis(2-Ethylhexyl)phthalate	< 330	ug/kg
4-Bromophenyl-phenylether	< 330	ug/kg
Butylbenzylphthalate	< 330	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95361	Date Taken:	04/04/00
Sample Description:	GP-5; 2-3'	Time Taken:	13:45
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 330	ug/kg	
4-Chloro-3-methylphenol	< 330	ug/kg	
2-Chloronaphthalene	< 330	ug/kg	
2-Chlorophenol	< 330	ug/kg	
4-Chlorophenyl-phenylether	< 330	ug/kg	
Chrysene	2,060	ug/kg	
Dibenz[a,h]anthracene	< 330	ug/kg	
Dibenzofuran	4,690	ug/kg	
1,2-Dichlorobenzene	< 330	ug/kg	
1,3-Dichlorobenzene	< 330	ug/kg	
1,4-Dichlorobenzene	< 330	ug/kg	
3,3'-Dichlorobenzidine	< 660	ug/kg	
2,4-Dichlorophenol	< 330	ug/kg	
Diethylphthalate	< 330	ug/kg	
2,4-Dimethylphenol	< 330	ug/kg	
Dimethylphthalate	< 330	ug/kg	
Di-n-butylphthalate	< 330	ug/kg	
4,6-Dinitro-2-methylphenol	< 1,600	ug/kg	
2,4-Dinitrophenol	< 1,600	ug/kg	
2,4-Dinitrotoluene	< 330	ug/kg	
2,6-Dinitrotoluene	< 330	ug/kg	
Di-n-octylphthalate	< 330	ug/kg	
Fluoranthene	11,800	ug/kg	
Fluorene	5,480	ug/kg	
Hexachlorobenzene	< 330	ug/kg	
Hexachlorobutadiene	< 330	ug/kg	
Hexachlorocyclopentadiene	< 330	ug/kg	
Hexachloroethane	< 330	ug/kg	
Indeno[1,2,3-cd]pyrene	569	ug/kg	
Isophorone	< 330	ug/kg	
2-Methylnaphthalene	6,410	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95361	Date Taken:	04/04/00
Sample Description:	GP-5; 2-3'	Time Taken:	13:45
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
2-Methylphenol	< 330	ug/kg	
3&4-Methylphenol	< 330	ug/kg	
Naphthalene	5,020	ug/kg	
2-Nitroaniline	< 1,600	ug/kg	
3-Nitroaniline	< 1,600	ug/kg	
4-Nitroaniline	< 1,600	ug/kg	
Nitrobenzene	< 330	ug/kg	
2-Nitrophenol	< 1,600	ug/kg	
4-Nitrophenol	< 1,600	ug/kg	
N-Nitrosodimethylamine	< 330	ug/kg	
N-Nitroso-di-n-propylamine	< 330	ug/kg	
n-Nitrosodiphenylamine	< 330	ug/kg	
Pentachlorophenol	< 1,600	ug/kg	
Phenanthrene	19,100	ug/kg	
Phenol	< 330	ug/kg	
Pyrene	7,980	ug/kg	
1,2,4-Trichlorobenzene	< 330	ug/kg	
2,4,5-Trichlorophenol	< 660	ug/kg	
2,4,6-Trichlorophenol	< 330	ug/kg	



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IEPA Certification #100292

Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95361	Date Taken:	04/04/00
Sample Description:	GP-5; 2-3'	Time Taken:	13:45
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/06/00

Date Analyzed: 04/11/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95361	Date Taken:	04/04/00
Sample Description:	GP-5; 2-3'	Time Taken:	13:45
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.10	mg/kg	04/06/00	9010B/9014
Aluminum	9,310	mg/kg	04/07/00	3050B/6010B
Antimony	<1.0	mg/kg	04/07/00	3050B/6010B
Arsenic	7.4	mg/kg	04/07/00	3050B/6010B
Barium	69.6	mg/kg	04/07/00	3050B/6010B
Beryllium	0.8	mg/kg	04/07/00	3050B/6010B
Cadmium	1.5	mg/kg	04/07/00	3050B/6010B
Calcium	69,300	mg/kg	04/07/00	3050B/6010B
Chromium	14.7	mg/kg	04/07/00	3050B/6010B
Cobalt	9.4	mg/kg	04/07/00	3050B/6010B
Copper	29.1	mg/kg	04/07/00	3050B/6010B
Iron	16,400	mg/kg	04/07/00	3050B/6010B
Lead	39.0	mg/kg	04/07/00	3050B/6010B
Magnesium	28,900	mg/kg	04/07/00	3050B/6010B
Manganese	666	mg/kg	04/07/00	3050B/6010B
Mercury	0.07	mg/kg	04/07/00	7470A
Nickel	27.8	mg/kg	04/07/00	3050B/6010B
Potassium	2,110	mg/kg	04/07/00	3050B/6010B
Selenium	<0.2	mg/kg	04/07/00	3050B/6010B
Silver	<0.1	mg/kg	04/07/00	3050B/6010B
Sodium	491	mg/kg	04/07/00	3050B/6010B
Thallium	<1.0	mg/kg	04/07/00	3050B/6010B
Vanadium	17.1	mg/kg	04/07/00	3050B/6010B
Zinc	63.2	mg/kg	04/07/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95362	Date Taken:	04/04/00
Sample Description:	GP-6; 9-10'	Time Taken:	14:50
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
Solids, Total	85.58	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/10/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95362	Date Taken:	04/04/00
Sample Description:	GP-6; 9-10'	Time Taken:	14:50
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/06/00

Analysis Date: 04/05/00

Acenaphthene	< 330	ug/kg
Acenaphthylene	< 330	ug/kg
Anthracene	< 330	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	< 330	ug/kg
Benzo[b]fluoranthene	< 330	ug/kg
Benzo[k]fluoranthene	< 330	ug/kg
Benzo[g,h,i]perylene	< 330	ug/kg
Benzo[a]pyrene	< 330	ug/kg
Benzoic Acid	< 330	ug/kg
Benzyl alcohol	< 330	ug/kg
bis(2-Chloroethoxy)methane	< 330	ug/kg
bis(2-Chloroethyl)ether	< 330	ug/kg
bis(2-chloroisopropyl)ether	< 330	ug/kg
bis(2-Ethylhexyl)phthalate	< 330	ug/kg
4-Bromophenyl-phenylether	< 330	ug/kg
Butylbenzylphthalate	< 330	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95362	Date Taken:	04/04/00
Sample Description:	GP-6; 9-10'	Time Taken:	14:50
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 330	ug/kg	
4-Chloro-3-methylphenol	< 330	ug/kg	
2-Chloronaphthalene	< 330	ug/kg	
2-Chlorophenol	< 330	ug/kg	
4-Chlorophenyl-phenylether	< 330	ug/kg	
Chrysene	< 330	ug/kg	
Dibenz[a,h]anthracene	< 330	ug/kg	
Dibenzofuran	< 330	ug/kg	
1,2-Dichlorobenzene	< 330	ug/kg	
1,3-Dichlorobenzene	< 330	ug/kg	
1,4-Dichlorobenzene	< 330	ug/kg	
3,3'-Dichlorobenzidine	< 660	ug/kg	
2,4-Dichlorophenol	< 330	ug/kg	
Diethylphthalate	< 330	ug/kg	
2,4-Dimethylphenol	< 330	ug/kg	
Dimethylphthalate	< 330	ug/kg	
Di-n-butylphthalate	< 330	ug/kg	
4,6-Dinitro-2-methylphenol	< 1,600	ug/kg	
2,4-Dinitrophenol	< 1,600	ug/kg	
2,4-Dinitrotoluene	< 330	ug/kg	
2,6-Dinitrotoluene	< 330	ug/kg	
Di-n-octylphthalate	< 330	ug/kg	
Fluoranthene	< 330	ug/kg	
Fluorene	< 330	ug/kg	
Hexachlorobenzene	< 330	ug/kg	
Hexachlorobutadiene	< 330	ug/kg	
Hexachlorocyclopentadiene	< 330	ug/kg	
Hexachloroethane	< 330	ug/kg	
Indeno[1,2,3-cd]pyrene	< 330	ug/kg	
Isophorone	< 330	ug/kg	
2-Methylnaphthalene	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95362	Date Taken:	04/04/00
Sample Description:	GP-6; 9-10'	Time Taken:	14:50
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
2-Methylphenol	< 330	ug/kg	
3&4-Methylphenol	< 330	ug/kg	
Naphthalene	< 330	ug/kg	
2-Nitroaniline	< 1,600	ug/kg	
3-Nitroaniline	< 1,600	ug/kg	
4-Nitroaniline	< 1,600	ug/kg	
Nitrobenzene	< 330	ug/kg	
2-Nitrophenol	< 1,600	ug/kg	
4-Nitrophenol	< 1,600	ug/kg	
N-Nitrosodimethylamine	< 330	ug/kg	
N-Nitroso-di-n-propylamine	< 330	ug/kg	
n-Nitrosodiphenylamine	< 330	ug/kg	
Pentachlorophenol	< 1,600	ug/kg	
Phenanthrene	522	ug/kg	
Phenol	< 330	ug/kg	
Pyrene	< 330	ug/kg	
1,2,4-Trichlorobenzene	< 330	ug/kg	
2,4,5-Trichlorophenol	< 660	ug/kg	
2,4,6-Trichlorophenol	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95362	Date Taken:	04/04/00
Sample Description:	GP-6; 9-10'	Time Taken:	14:50
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/06/00
Date Analyzed: 04/11/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.			
Project ID:	4917-410-0	Date Received:	04/05/00	
Sample Number:	95362	Date Taken:	04/04/00	
Sample Description:	GP-6; 9-10'	Time Taken:	14:50	
Lab File ID:	95357-65	Date Reported:	04/12/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	0.24	mg/kg	04/06/00	9010B/9014
Aluminum	7,200	mg/kg	04/07/00	3050B/6010B
Antimony	2.1	mg/kg	04/07/00	3050B/6010B
Arsenic	5.4	mg/kg	04/07/00	3050B/6010B
Barium	82.0	mg/kg	04/07/00	3050B/6010B
Beryllium	1.1	mg/kg	04/07/00	3050B/6010B
Cadmium	3.0	mg/kg	04/07/00	3050B/6010B
Calcium	21,200	mg/kg	04/07/00	3050B/6010B
Chromium	9.4	mg/kg	04/07/00	3050B/6010B
Cobalt	7.7	mg/kg	04/07/00	3050B/6010B
Copper	24.7	mg/kg	04/07/00	3050B/6010B
Iron	30,800	mg/kg	04/07/00	3050B/6010B
Lead	32.1	mg/kg	04/07/00	3050B/6010B
Magnesium	5,460	mg/kg	04/07/00	3050B/6010B
Manganese	234	mg/kg	04/07/00	3050B/6010B
Mercury	<0.05	mg/kg	04/07/00	7470A
Nickel	30.1	mg/kg	04/07/00	3050B/6010B
Potassium	902	mg/kg	04/07/00	3050B/6010B
Selenium	<0.2	mg/kg	04/07/00	3050B/6010B
Silver	<0.1	mg/kg	04/07/00	3050B/6010B
Sodium	859	mg/kg	04/07/00	3050B/6010B
Thallium	<1.0	mg/kg	04/07/00	3050B/6010B
Vanadium	18.3	mg/kg	04/07/00	3050B/6010B
Zinc	105	mg/kg	04/07/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95363	Date Taken:	04/04/00
Sample Description:	GP-7; 1-3'	Time Taken:	15:30
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
Solids, Total	87.66	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95363	Date Taken:	04/04/00
Sample Description:	GP-7; 1-3'	Time Taken:	15:30
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/06/00

Analysis Date: 04/07/00

Acenaphthene	343	ug/kg
Acenaphthylene	< 330	ug/kg
Anthracene	1,150	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	4,440	ug/kg
Benzo[b]fluoranthene	5,240	ug/kg
Benzo[k]fluoranthene	4,740	ug/kg
Benzo[g,h,i]perylene	1,090	ug/kg
Benzo[a]pyrene	5,070	ug/kg
Benzoic Acid	< 330	ug/kg
Benzyl alcohol	< 330	ug/kg
bis(2-Chloroethoxy)methane	< 330	ug/kg
bis(2-Chloroethyl)ether	< 330	ug/kg
bis(2-chloroisopropyl)ether	< 330	ug/kg
bis(2-Ethylhexyl)phthalate	< 330	ug/kg
4-Bromophenyl-phenylether	< 330	ug/kg
Butylbenzylphthalate	< 330	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95363	Date Taken:	04/04/00
Sample Description:	GP-7; 1-3'	Time Taken:	15:30
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 330	ug/kg	
4-Chloro-3-methylphenol	< 330	ug/kg	
2-Chloronaphthalene	< 330	ug/kg	
2-Chlorophenol	< 330	ug/kg	
4-Chlorophenyl-phenylether	< 330	ug/kg	
Chrysene	4,150	ug/kg	
Dibenz[a,h]anthracene	590	ug/kg	
Dibenzofuran	< 330	ug/kg	
1,2-Dichlorobenzene	< 330	ug/kg	
1,3-Dichlorobenzene	< 330	ug/kg	
1,4-Dichlorobenzene	< 330	ug/kg	
3,3'-Dichlorobenzidine	< 660	ug/kg	
2,4-Dichlorophenol	< 330	ug/kg	
Diethylphthalate	< 330	ug/kg	
2,4-Dimethylphenol	< 330	ug/kg	
Dimethylphthalate	< 330	ug/kg	
Di-n-butylphthalate	< 330	ug/kg	
4,6-Dinitro-2-methylphenol	< 1,600	ug/kg	
2,4-Dinitrophenol	< 1,600	ug/kg	
2,4-Dinitrotoluene	< 330	ug/kg	
2,6-Dinitrotoluene	< 330	ug/kg	
Di-n-octylphthalate	< 330	ug/kg	
Fluoranthene	9,250	ug/kg	
Fluorene	339	ug/kg	
Hexachlorobenzene	< 330	ug/kg	
Hexachlorobutadiene	< 330	ug/kg	
Hexachlorocyclopentadiene	< 330	ug/kg	
Hexachloroethane	< 330	ug/kg	
Indeno[1,2,3-cd]pyrene	1,300	ug/kg	
Isophorone	< 330	ug/kg	
2-Methylnaphthalene	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95363	Date Taken:	04/04/00
Sample Description:	GP-7; 1-3'	Time Taken:	15:30
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
2-Methylphenol	< 330	ug/kg	
3&4-Methylphenol	< 330	ug/kg	
Naphthalene	< 330	ug/kg	
2-Nitroaniline	< 1,600	ug/kg	
3-Nitroaniline	< 1,600	ug/kg	
4-Nitroaniline	< 1,600	ug/kg	
Nitrobenzene	< 330	ug/kg	
2-Nitrophenol	< 1,600	ug/kg	
4-Nitrophenol	< 1,600	ug/kg	
N-Nitrosodimethylamine	< 330	ug/kg	
N-Nitroso-di-n-propylamine	< 330	ug/kg	
n-Nitrosodiphenylamine	< 330	ug/kg	
Pentachlorophenol	< 1,600	ug/kg	
Phenanthrene	5,280	ug/kg	
Phenol	< 330	ug/kg	
Pyrene	8,670	ug/kg	
1,2,4-Trichlorobenzene	< 330	ug/kg	
2,4,5-Trichlorophenol	< 660	ug/kg	
2,4,6-Trichlorophenol	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95363	Date Taken:	04/04/00
Sample Description:	GP-7; 1-3'	Time Taken:	15:30
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/06/00
Date Analyzed: 04/11/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.			
Project ID:	4917-410-0	Date Received:	04/05/00	
Sample Number:	95363	Date Taken:	04/04/00	
Sample Description:	GP-7; 1-3'	Time Taken:	15:30	
Lab File ID:	95357-65	Date Reported:	04/12/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	0.22	mg/kg	04/06/00	9010B/9014
Aluminum	4,780	mg/kg	04/07/00	3050B/6010B
Antimony	1.4	mg/kg	04/07/00	3050B/6010B
Arsenic	5.0	mg/kg	04/07/00	3050B/6010B
Barium	127	mg/kg	04/07/00	3050B/6010B
Beryllium	0.6	mg/kg	04/07/00	3050B/6010B
Cadmium	1.8	mg/kg	04/07/00	3050B/6010B
Calcium	59,300	mg/kg	04/07/00	3050B/6010B
Chromium	8.3	mg/kg	04/07/00	3050B/6010B
Cobalt	2.8	mg/kg	04/07/00	3050B/6010B
Copper	116	mg/kg	04/07/00	3050B/6010B
Iron	12,600	mg/kg	04/07/00	3050B/6010B
Lead	233	mg/kg	04/07/00	3050B/6010B
Magnesium	13,300	mg/kg	04/07/00	3050B/6010B
Manganese	702	mg/kg	04/07/00	3050B/6010B
Mercury	0.76	mg/kg	04/07/00	7470A
Nickel	10.1	mg/kg	04/07/00	3050B/6010B
Potassium	501	mg/kg	04/07/00	3050B/6010B
Selenium	<0.2	mg/kg	04/07/00	3050B/6010B
Silver	0.2	mg/kg	04/07/00	3050B/6010B
Sodium	542	mg/kg	04/07/00	3050B/6010B
Thallium	<1.0	mg/kg	04/07/00	3050B/6010B
Vanadium	9.2	mg/kg	04/07/00	3050B/6010B
Zinc	253	mg/kg	04/07/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95364	Date Taken:	04/04/00
Sample Description:	GP-8; 1-3'	Time Taken:	1500
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
Solids, Total	86.67	%	

Volatile Organic Compounds Method 5035/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/kg
Benzene	< 5.0	ug/kg
Bromodichloromethane	< 5.0	ug/kg
Bromoform	< 5.0	ug/kg
Bromomethane	< 10.0	ug/kg
2-Butanone	< 10.0	ug/kg
Carbon disulfide	< 5.0	ug/kg
Carbon tetrachloride	< 5.0	ug/kg
Chlorobenzene	< 5.0	ug/kg
Chlorodibromomethane	< 5.0	ug/kg
Chloroethane	< 10.0	ug/kg
Chloroform	< 5.0	ug/kg
Chloromethane	< 10.0	ug/kg
1,1-Dichloroethane	< 5.0	ug/kg
1,2-Dichloroethane	< 5.0	ug/kg
1,1-Dichloroethene	< 5.0	ug/kg
cis-1,2-Dichloroethene	< 5.0	ug/kg
trans-1,2-Dichloroethene	< 5.0	ug/kg
1,2-Dichloropropane	< 5.0	ug/kg
cis-1,3-Dichloropropene	< 5.0	ug/kg
trans-1,3-Dichloropropene	< 5.0	ug/kg
Ethyl benzene	< 5.0	ug/kg
2-Hexanone	< 10.0	ug/kg
4-Methyl-2-pentanone	< 10.0	ug/kg
Methylene chloride	< 5.0	ug/kg
Styrene	< 5.0	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95364	Date Taken:	04/04/00
Sample Description:	GP-8; 1-3'	Time Taken:	1500
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
1,1,2,2-Tetrachloroethane	< 5.0	ug/kg	
Tetrachloroethene	< 5.0	ug/kg	
Toluene	< 5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	ug/kg	
Trichloroethene	< 5.0	ug/kg	
Vinyl Acetate	< 10.0	ug/kg	
Vinyl Chloride	< 10.0	ug/kg	
Xylenes (total)	< 5.0	ug/kg	

Base-Neutral/Acid Compounds Method 3540C/8270C

Preparation Date: 04/06/00
Analysis Date: 04/07/00

Acenaphthene	3,260	ug/kg
Acenaphthylene	< 330	ug/kg
Anthracene	6,290	ug/kg
Benzidine	< 330	ug/kg
Benzo[a]anthracene	15,600	ug/kg
Benzo[b]fluoranthene	16,200	ug/kg
Benzo[k]fluoranthene	11,400	ug/kg
Benzo[g,h,i]perylene	5,500	ug/kg
Benzo[a]pyrene	15,300	ug/kg
Benzoic Acid	< 330	ug/kg
Benzyl alcohol	< 330	ug/kg
bis(2-Chloroethoxy)methane	< 330	ug/kg
bis(2-Chloroethyl)ether	< 330	ug/kg
bis(2-chloroisopropyl)ether	< 330	ug/kg
bis(2-Ethylhexyl)phthalate	< 330	ug/kg
4-Bromophenyl-phenylether	< 330	ug/kg
Butylbenzylphthalate	< 330	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95364	Date Taken:	04/04/00
Sample Description:	GP-8; 1-3'	Time Taken:	1500
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 330	ug/kg	
4-Chloro-3-methylphenol	< 330	ug/kg	
2-Chloronaphthalene	< 330	ug/kg	
2-Chlorophenol	< 330	ug/kg	
4-Chlorophenyl-phenylether	< 330	ug/kg	
Chrysene	15,800	ug/kg	
Dibenz[a,h]anthracene	2,750	ug/kg	
Dibenzofuran	1,120	ug/kg	
1,2-Dichlorobenzene	< 330	ug/kg	
1,3-Dichlorobenzene	< 330	ug/kg	
1,4-Dichlorobenzene	< 330	ug/kg	
3,3'-Dichlorobenzidine	< 660	ug/kg	
2,4-Dichlorophenol	< 330	ug/kg	
Diethylphthalate	< 330	ug/kg	
2,4-Dimethylphenol	< 330	ug/kg	
Dimethylphthalate	< 330	ug/kg	
Di-n-butylphthalate	< 330	ug/kg	
4,6-Dinitro-2-methylphenol	< 1,600	ug/kg	
2,4-Dinitrophenol	< 1,600	ug/kg	
2,4-Dinitrotoluene	< 330	ug/kg	
2,6-Dinitrotoluene	< 330	ug/kg	
Di-n-octylphthalate	< 330	ug/kg	
Fluoranthene	39,000	ug/kg	
Fluorene	2,470	ug/kg	
Hexachlorobenzene	< 330	ug/kg	
Hexachlorobutadiene	< 330	ug/kg	
Hexachlorocyclopentadiene	< 330	ug/kg	
Hexachloroethane	< 330	ug/kg	
Indeno[1,2,3-cd]pyrene	6,100	ug/kg	
Isophorone	< 330	ug/kg	
2-Methylnaphthalene	537	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95364	Date Taken:	04/04/00
Sample Description:	GP-8; 1-3'	Time Taken:	1500
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
2-Methylphenol	< 330	ug/kg	
3&4-Methylphenol	< 330	ug/kg	
Naphthalene	482	ug/kg	
2-Nitroaniline	< 1,600	ug/kg	
3-Nitroaniline	< 1,600	ug/kg	
4-Nitroaniline	< 1,600	ug/kg	
Nitrobenzene	< 330	ug/kg	
2-Nitrophenol	< 1,600	ug/kg	
4-Nitrophenol	< 1,600	ug/kg	
N-Nitrosodimethylamine	< 330	ug/kg	
N-Nitroso-di-n-propylamine	< 330	ug/kg	
n-Nitrosodiphenylamine	< 330	ug/kg	
Pentachlorophenol	< 1,600	ug/kg	
Phenanthrene	31,200	ug/kg	
Phenol	< 330	ug/kg	
Pyrene	32,200	ug/kg	
1,2,4-Trichlorobenzene	< 330	ug/kg	
2,4,5-Trichlorophenol	< 660	ug/kg	
2,4,6-Trichlorophenol	< 330	ug/kg	



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95364	Date Taken:	04/04/00
Sample Description:	GP-8; 1-3'	Time Taken:	1500
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3540C/8081A/8082

Preparation Date: 04/06/00
Date Analyzed: 04/11/00

Aldrin	< 8.0	ug/kg
Aroclor 1016	< 80.0	ug/kg
Aroclor 1221	< 80.0	ug/kg
Aroclor 1232	< 80.0	ug/kg
Aroclor 1242	< 80.0	ug/kg
Aroclor 1248	< 80.0	ug/kg
Aroclor 1254	< 160	ug/kg
Aroclor 1260	< 160	ug/kg
alpha-BHC	< 8.0	ug/kg
beta-BHC	< 8.0	ug/kg
delta-BHC	< 8.0	ug/kg
Lindane (gamma-BHC)	< 8.0	ug/kg
alpha-Chlordane	< 80.0	ug/kg
gamma-Chlordane	< 80.0	ug/kg
4,4'-DDD	< 16.0	ug/kg
4,4'-DDE	< 16.0	ug/kg
4,4-DDT	< 16.0	ug/kg
Dieldrin	< 16.0	ug/kg
Endosulfan I	< 8.0	ug/kg
Endosulfan II	< 16.0	ug/kg
Endosulfan sulfate	< 16.0	ug/kg
Endrin	< 16.0	ug/kg
Endrin aldehyde	< 16.0	ug/kg
Endrin ketone	< 16.0	ug/kg
Heptachlor	< 8.0	ug/kg
Heptachlor epoxide	< 8.0	ug/kg
Methoxychlor	< 80.0	ug/kg
Toxaphene	< 160	ug/kg



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Analytical Report

Client:	GAIA TECH, INC.			
Project ID:	4917-410-0	Date Received:	04/05/00	
Sample Number:	95364	Date Taken:	04/04/00	
Sample Description:	GP-8; 1-3'	Time Taken:	15:00	
Lab File ID:	95357-65	Date Reported:	04/12/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	0.21	mg/kg	04/06/00	9010B/9014
Aluminum	4,690	mg/kg	04/07/00	3050B/6010B
Antimony	2.0	mg/kg	04/07/00	3050B/6010B
Arsenic	11.0	mg/kg	04/07/00	3050B/6010B
Barium	675	mg/kg	04/07/00	3050B/6010B
Beryllium	0.9	mg/kg	04/07/00	3050B/6010B
Cadmium	3.1	mg/kg	04/07/00	3050B/6010B
Calcium	25,800	mg/kg	04/07/00	3050B/6010B
Chromium	9.9	mg/kg	04/07/00	3050B/6010B
Cobalt	9.7	mg/kg	04/07/00	3050B/6010B
Copper	298	mg/kg	04/07/00	3050B/6010B
Iron	21,400	mg/kg	04/07/00	3050B/6010B
Lead	186	mg/kg	04/07/00	3050B/6010B
Magnesium	8,700	mg/kg	04/07/00	3050B/6010B
Manganese	291	mg/kg	04/07/00	3050B/6010B
Mercury	0.55	mg/kg	04/07/00	7470A
Nickel	21.1	mg/kg	04/07/00	3050B/6010B
Potassium	560	mg/kg	04/07/00	3050B/6010B
Selenium	<0.2	mg/kg	04/07/00	3050B/6010B
Silver	<0.1	mg/kg	04/07/00	3050B/6010B
Sodium	811	mg/kg	04/07/00	3050B/6010B
Thallium	<1.0	mg/kg	04/07/00	3050B/6010B
Vanadium	23.4	mg/kg	04/07/00	3050B/6010B
Zinc	493	mg/kg	04/07/00	3050B/6010B



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95365	Date Taken:	N/A
Sample Description:	Trip Blank	Time Taken:	N/A
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
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Volatile Organic Compounds Method 5030B/8260B

Analysis Date: 04/07/00

Acetone	< 10.0	ug/L
Benzene	< 5.0	ug/L
Bromodichloromethane	< 5.0	ug/L
Bromoform	< 5.0	ug/L
Bromomethane	< 10.0	ug/L
2-Butanone	< 10.0	ug/L
Carbon disulfide	< 5.0	ug/L
Carbon tetrachloride	< 5.0	ug/L
Chlorobenzene	< 5.0	ug/L
Chlorodibromomethane	< 5.0	ug/L
Chloroethane	< 10.0	ug/L
Chloroform	< 5.0	ug/L
Chloromethane	< 10.0	ug/L
1,1-Dichloroethane	< 5.0	ug/L
1,2-Dichloroethane	< 5.0	ug/L
1,1-Dichloroethene	< 5.0	ug/L
cis-1,2-Dichloroethene	< 5.0	ug/L
trans-1,2-Dichloroethene	< 5.0	ug/L
1,2-Dichloropropane	< 5.0	ug/L
cis-1,3-Dichloropropene	< 5.0	ug/L
trans-1,3-Dichloropropene	< 5.0	ug/L
Ethyl benzene	< 5.0	ug/L
2-Hexanone	< 10.0	ug/L
4-Methyl-2-pentanone	< 10.0	ug/L
Methylene chloride	< 5.0	ug/L
Styrene	< 5.0	ug/L
1,1,2,2-Tetrachloroethane	< 5.0	ug/L
Tetrachloroethene	< 5.0	ug/L



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Analytical Report

Client:	GAIA TECH, INC.		
Project ID:	4917-410-0	Date Received:	04/05/00
Sample Number:	95365	Date Taken:	N/A
Sample Description:	Trip Blank	Time Taken:	N/A
Lab File ID:	95357-65	Date Reported:	04/12/00

Analyte	Result	Units	Flags
Toluene	< 5.0	ug/L	
1,1,1-Trichloroethane	< 5.0	ug/L	
1,1,2-Trichloroethane	< 5.0	ug/L	
Trichloroethene	< 5.0	ug/L	
Vinyl Acetate	< 10.0	ug/L	
Vinyl Chloride	< 10.0	ug/L	
Xylenes (total)	< 5.0	ug/L	



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CHAIN OF CUSTODY RECORD

COMPANY NAME: GrataTech INC
 ADDRESS: 111 North Franklin, Suite 2500, Chicago, IL
 PHONE: 312-841-4200 FAX: 541-0340
 CONTACT NAME Larry Bertsch
 SAMPLED BY: Larry Bertsch

ANALYSES

DATE/TIME TAKEN	SAMPLE DESCRIPTION	MATRIX	TAL			TCV			COMMENTS	LAB I.D.
			TAL	TCV	TCV	TAL	TCV	TCV		
4/14/00 9:45	GP-1 1-3'	S	V	V						95357
10:10	GP-1 GP-2 2-3'		V	V						358
10:30	GP-2 6-8'								HOLD	
11:10	GP-3 2-3								HOLD	
11:15	GP-3 6-8 "		V	V						95359
12:25	GP-4 1-3								HOLD	
12:40	GP-4 6-8 8-10'		V	V						95360
13:45	GP-5 2-3		V	V						361
14:00	GP-6 2-3'								HOLD	
14:50	GP-6 9-10'		V	V						95362
15:30	GP-7 1-3'		V	V						363
14:00	GP-7 6-8'								HOLD	
15:00	GP-8 1-3'	S	V	V						95364
15:15	GP-8 8-10'								HOLD	

Matrix Codes: S = Soil W = Water O = Other

Trip Blank ^W
 Preserved in: Lab Field

Cooler Temperature: 51.4 °C

95365

Notes and Special Instructions:

Yanne Bertsch
 Relinquished By: Yanne Bertsch Date/Time 4/15/00 Received By: Helen Dyneck Date/Time 4/15/00 14:00
 Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____
 Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____

Groundwater Analytical Reports



**First
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April 14, 2000

Mr. Larry Bertsch
GAIATECH INC.
1 North Franklin, Suite 2500
Chicago, IL 60606

Project ID: 4917-410-0
First Environmental File ID: 95500-05
Date Received: April 6th, 2000

Dear Mr. Bertsch:

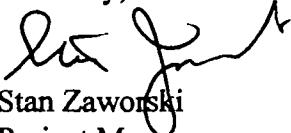
These samples were analyzed as directed on the enclosed chain of custody.

All analyses were performed in accordance with methods from the USEPA publication Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition, December 1996. The actual method references are listed on the Analytical Report. Results have been expressed on a dry weight basis per method protocol.

All analyses were performed within established holding times, and all Quality Control criteria as outlined in the methods have been met. QA/QC documentation and raw data will remain on file for future reference.

It has been a pleasure providing you with analytical services, and we look forward to working with you again in the future. If you have any questions regarding this report, or need additional information, please contact me at (630) 778-1200.

Sincerely,



Stan Zaworski
Project Manager



First Environmental Laboratories, Inc.

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IEPA Certification #100292

Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95500	Date Taken:	04/05/00
Sample Description:	GP-8	Time Taken:	13:00
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Volatile Organic Compounds Method 5030B/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/L
Benzene	< 5.0	ug/L
Bromodichloromethane	< 5.0	ug/L
Bromoform	< 5.0	ug/L
Bromomethane	< 10.0	ug/L
2-Butanone	< 10.0	ug/L
Carbon disulfide	< 5.0	ug/L
Carbon tetrachloride	< 5.0	ug/L
Chlorobenzene	< 5.0	ug/L
Chlorodibromomethane	< 5.0	ug/L
Chloroethane	< 10.0	ug/L
Chloroform	< 5.0	ug/L
Chloromethane	< 10.0	ug/L
1,1-Dichloroethane	< 5.0	ug/L
1,2-Dichloroethane	< 5.0	ug/L
1,1-Dichloroethene	< 5.0	ug/L
cis-1,2-Dichloroethene	< 5.0	ug/L
trans-1,2-Dichloroethene	< 5.0	ug/L
1,2-Dichloropropane	< 5.0	ug/L
cis-1,3-Dichloropropene	< 5.0	ug/L
trans-1,3-Dichloropropene	< 5.0	ug/L
Ethyl benzene	< 5.0	ug/L
2-Hexanone	< 10.0	ug/L
4-Methyl-2-pentanone	< 10.0	ug/L
Methylene chloride	< 5.0	ug/L
Styrene	< 5.0	ug/L
1,1,2,2-Tetrachloroethane	< 5.0	ug/L
Tetrachloroethene	< 5.0	ug/L



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95500	Date Taken:	04/05/00
Sample Description:	GP-8	Time Taken:	13:00
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Toluene	< 5.0	ug/L	
1,1,1-Trichloroethane	< 5.0	ug/L	
1,1,2-Trichloroethane	< 5.0	ug/L	
Trichloroethene	< 5.0	ug/L	
Vinyl Acetate	< 10.0	ug/L	
Vinyl Chloride	< 10.0	ug/L	
Xylenes (total)	< 5.0	ug/L	

Base-Neutral/Acid Compounds Method 3510C/8270C

Preparation Date: 04/07/00

Analysis Date: 04/10/00

Acenaphthene	< 10	ug/L
Acenaphthylene	< 10	ug/L
Anthracene	< 10	ug/L
Benzidine	< 10	ug/L
Benzo[a]anthracene	< 10	ug/L
Benzo[b]fluoranthene	< 10	ug/L
Benzo[k]fluoranthene	< 10	ug/L
Benzo[g,h,i]perylene	< 10	ug/L
Benzo[a]pyrene	< 10	ug/L
Benzoic Acid	< 50	ug/L
Benzyl Alcohol	< 20	ug/L
bis(2-chloroethoxy)methane	< 10	ug/L
bis(2-chloroethyl)ether	< 10	ug/L
bis(2-chloroisopropyl)ether	< 10	ug/L
bis(2-ethylhexyl)phthalate	< 10	ug/L
4-Bromophenyl-phenylether	< 10	ug/L
Butylbenzylphthalate	< 10	ug/L
4-Chloroaniline	< 10	ug/L
4-Chloro-3-methylphenol	< 20	ug/L



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95500	Date Taken:	04/05/00
Sample Description:	GP-8	Time Taken:	13:00
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
2-Chloronaphthalene	< 10	ug/L	
2-Chlorophenol	< 10	ug/L	
4-Chlorophenyl-phenylether	< 10	ug/L	
Chrysene	< 10	ug/L	
Dibenz[a,h]anthracene	< 10	ug/L	
Dibenzofuran	< 10	ug/L	
1,2-Dichlorobenzene	< 10	ug/L	
1,3-Dichlorobenzene	< 10	ug/L	
1,4-Dichlorobenzene	< 10	ug/L	
3,3-Dichorobenzidine	< 20	ug/L	
2,4-Dichlorophenol	< 10	ug/L	
Diethylphthalate	< 10	ug/L	
2,4-Dimethylphenol	< 10	ug/L	
Dimethylphthalate	< 10	ug/L	
Di-n-butylphthalate	< 10	ug/L	
4,6-Dinitro-2-methylphenol	< 50	ug/L	
2,4-Dinitrophenol	< 50	ug/L	
2,4-Dinitrotoluene	< 10	ug/L	
2,6-Dinitrotoluene	< 10	ug/L	
Di-n-octylphthalate	< 10	ug/L	
Fluoranthene	< 10	ug/L	
Fluorene	< 10	ug/L	
Hexachlorobenzene	< 10	ug/L	
Hexachlorobutadiene	< 10	ug/L	
Hexachlorocyclopentadiene	< 10	ug/L	
Hexachloroethane	< 10	ug/L	
Indeno[1,2,3-cd]pyrene	< 10	ug/L	
Isophorone	< 10	ug/L	
2-Methylnaphthalene	< 10	ug/L	
2-Methylphenol	< 10	ug/L	
3&4-Methylphenol	< 10	ug/L	



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95500	Date Taken:	04/05/00
Sample Description:	GP-8	Time Taken:	13:00
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Naphthalene	< 10	ug/L	
2-Nitroaniline	< 50	ug/L	
3-Nitroaniline	< 50	ug/L	
4-Nitroaniline	< 20	ug/L	
Nitrobenzene	< 10	ug/L	
2-Nitrophenol	< 10	ug/L	
4-Nitrophenol	< 50	ug/L	
N-Nitrosodimethylamine	< 10	ug/L	
N-Nitroso-di-n-propylamine	< 10	ug/L	
n-Nitrosodiphenylamine	< 10	ug/L	
Pentachlorophenol	< 50	ug/L	
Phenanthrene	< 10	ug/L	
Phenol	< 10	ug/L	
Pyrene	< 10	ug/L	
1,2,4-Trichlorobenzene	< 10	ug/L	
2,4,5-Trichlorophenol	< 10	ug/L	
2,4,6-Trichlorophenol	< 10	ug/L	



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95500	Date Taken:	04/05/00
Sample Description:	GP-8	Time Taken:	13:00
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3510C/8081A/8082

Preparation Date: 04/07/00
Analysis Date: 04/11/00

Aldrin	< 0.05	ug/L
Aroclor 1016	< 0.5	ug/L
Aroclor 1221	< 0.5	ug/L
Aroclor 1232	< 0.5	ug/L
Aroclor 1242	< 0.5	ug/L
Aroclor 1248	< 0.5	ug/L
Aroclor 1254	< 1	ug/L
Aroclor 1260	< 1	ug/L
alpha-BHC	< 0.05	ug/L
beta-BHC	< 0.05	ug/L
delta-BHC	< 0.05	ug/L
Lindane (gamma-BHC)	< 0.05	ug/L
alpha-Chlordane	< 0.5	ug/L
gamma-Chlordane	< 0.5	ug/L
4,4'-DDD	< 0.1	ug/L
4,4'-DDE	< 0.1	ug/L
4,4-DDT	< 0.1	ug/L
Dieldrin	< 0.1	ug/L
Endosulfan I	< 0.05	ug/L
Endosulfan II	< 0.1	ug/L
Endosulfan sulfate	< 0.1	ug/L
Endrin	< 0.1	ug/L
Endrin aldehyde	< 0.1	ug/L
Endrin ketone	< 0.1	ug/L
Heptachlor	< 0.05	ug/L
Heptachlor epoxide	< 0.05	ug/L
Methoxychlor	< 0.5	ug/L
Toxaphene	< 1	ug/L



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Analytical Report

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Project ID:	#4917-410-0	Date Received:	04/06/00	
Sample Number:	95500	Date Taken:	04/05/00	
Sample Description:	GP-8	Time Taken:	13:00	
Lab File ID:	95500-05	Date Reported:	04/13/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	0.008	mg/L	04/11/00	9010B/9014
Aluminum	0.15	mg/L	04/11/00	3010A/6010B
Antimony	<0.01	mg/L	04/11/00	3010A/6010B
Arsenic	0.004	mg/L	04/11/00	3010A/6010B
Barium	0.022	mg/L	04/11/00	3010A/6010B
Beryllium	<0.001	mg/L	04/11/00	3010A/6010B
Cadmium	<0.001	mg/L	04/11/00	3010A/6010B
Calcium	99.8	mg/L	04/11/00	3010A/6010B
Chromium	0.001	mg/L	04/11/00	3010A/6010B
Cobalt	0.001	mg/L	04/11/00	3010A/6010B
Copper	0.009	mg/L	04/11/00	3010A/6010B
Iron	0.49	mg/L	04/11/00	3010A/6010B
Lead	<0.002	mg/L	04/11/00	3010A/6010B
Magnesium	14.5	mg/L	04/11/00	3010A/6010B
Manganese	0.040	mg/L	04/11/00	3010A/6010B
Mercury	<0.0005	mg/L	04/07/00	7470A
Nickel	0.007	mg/L	04/11/00	3010A/6010B
Potassium	23.7	mg/L	04/11/00	3010A/6010B
Selenium	0.019	mg/L	04/11/00	3010A/6010B
Silver	<0.001	mg/L	04/11/00	3010A/6010B
Sodium	422	mg/L	04/13/00	3010A/6010B
Thallium	<0.01	mg/L	04/11/00	3010A/6010B
Vanadium	<0.01	mg/L	04/11/00	3010A/6010B
Zinc	0.007	mg/L	04/11/00	3010A/6010B



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95501	Date Taken:	04/05/00
Sample Description:	GP-10	Time Taken:	10:00
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Volatile Organic Compounds Method 5030B/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/L
Benzene	< 5.0	ug/L
Bromodichloromethane	< 5.0	ug/L
Bromoform	< 5.0	ug/L
Bromomethane	< 10.0	ug/L
2-Butanone	< 10.0	ug/L
Carbon disulfide	< 5.0	ug/L
Carbon tetrachloride	< 5.0	ug/L
Chlorobenzene	< 5.0	ug/L
Chlorodibromomethane	< 5.0	ug/L
Chloroethane	< 10.0	ug/L
Chloroform	< 5.0	ug/L
Chloromethane	< 10.0	ug/L
1,1-Dichloroethane	< 5.0	ug/L
1,2-Dichloroethane	< 5.0	ug/L
1,1-Dichloroethene	< 5.0	ug/L
cis-1,2-Dichloroethene	< 5.0	ug/L
trans-1,2-Dichloroethene	< 5.0	ug/L
1,2-Dichloropropane	< 5.0	ug/L
cis-1,3-Dichloropropene	< 5.0	ug/L
trans-1,3-Dichloropropene	< 5.0	ug/L
Ethyl benzene	< 5.0	ug/L
2-Hexanone	< 10.0	ug/L
4-Methyl-2-pentanone	< 10.0	ug/L
Methylene chloride	< 5.0	ug/L
Styrene	< 5.0	ug/L
1,1,2,2-Tetrachloroethane	< 5.0	ug/L
Tetrachloroethene	< 5.0	ug/L



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Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95501	Date Taken:	04/05/00
Sample Description:	GP-10	Time Taken:	10:00
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Toluene	< 5.0	ug/L	
1,1,1-Trichloroethane	< 5.0	ug/L	
1,1,2-Trichloroethane	< 5.0	ug/L	
Trichloroethene	< 5.0	ug/L	
Vinyl Acetate	< 10.0	ug/L	
Vinyl Chloride	< 10.0	ug/L	
Xylenes (total)	< 5.0	ug/L	

Base-Neutral/Acid Compounds Method 3510C/8270C

Preparation Date: 04/07/00
Analysis Date: 04/10/00

Acenaphthene	< 10	ug/L
Acenaphthylene	< 10	ug/L
Anthracene	< 10	ug/L
Benzidine	< 10	ug/L
Benzo[a]anthracene	< 10	ug/L
Benzo[b]fluoranthene	< 10	ug/L
Benzo[k]fluoranthene	< 10	ug/L
Benzo[g,h,i]perylene	< 10	ug/L
Benzo[a]pyrene	< 10	ug/L
Benzoic Acid	< 50	ug/L
Benzyl Alcohol	< 20	ug/L
bis(2-chloroethoxy)methane	< 10	ug/L
bis(2-chloroethyl)ether	< 10	ug/L
bis(2-chloroisopropyl)ether	< 10	ug/L
bis(2-ethylhexyl)phthalate	< 10	ug/L
4-Bromophenyl-phenylether	< 10	ug/L
Butylbenzylphthalate	< 10	ug/L
4-Chloroaniline	< 10	ug/L
4-Chloro-3-methylphenol	< 20	ug/L



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Sample Number:	95501	Date Taken:	04/05/00
Sample Description:	GP-10	Time Taken:	10:00
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
2-Chloronaphthalene	< 10	ug/L	
2-Chlorophenol	< 10	ug/L	
4-Chlorophenyl-phenylether	< 10	ug/L	
Chrysene	< 10	ug/L	
Dibenz[a,h]anthracene	< 10	ug/L	
Dibenzofuran	< 10	ug/L	
1,2-Dichlorobenzene	< 10	ug/L	
1,3-Dichlorobenzene	< 10	ug/L	
1,4-Dichlorobenzene	< 10	ug/L	
3,3-Dichorobenzidine	< 20	ug/L	
2,4-Dichlorophenol	< 10	ug/L	
Diethylphthalate	< 10	ug/L	
2,4-Dimethylphenol	< 10	ug/L	
Dimethylphthalate	< 10	ug/L	
Di-n-butylphthalate	< 10	ug/L	
4,6-Dinitro-2-methylphenol	< 50	ug/L	
2,4-Dinitrophenol	< 50	ug/L	
2,4-Dinitrotoluene	< 10	ug/L	
2,6-Dinitrotoluene	< 10	ug/L	
Di-n-octylphthalate	< 10	ug/L	
Fluoranthene	< 10	ug/L	
Fluorene	< 10	ug/L	
Hexachlorobenzene	< 10	ug/L	
Hexachlorobutadiene	< 10	ug/L	
Hexachlorocyclopentadiene	< 10	ug/L	
Hexachloroethane	< 10	ug/L	
Indeno[1,2,3-cd]pyrene	< 10	ug/L	
Isophorone	< 10	ug/L	
2-Methylnaphthalene	< 10	ug/L	
2-Methylphenol	< 10	ug/L	
3&4-Methylphenol	< 10	ug/L	



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Sample Number:	95501	Date Taken:	04/05/00
Sample Description:	GP-10	Time Taken:	10:00
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Naphthalene	< 10	ug/L	
2-Nitroaniline	< 50	ug/L	
3-Nitroaniline	< 50	ug/L	
4-Nitroaniline	< 20	ug/L	
Nitrobenzene	< 10	ug/L	
2-Nitrophenol	< 10	ug/L	
4-Nitrophenol	< 50	ug/L	
N-Nitrosodimethylamine	< 10	ug/L	
N-Nitroso-di-n-propylamine	< 10	ug/L	
n-Nitrosodiphenylamine	< 10	ug/L	
Pentachlorophenol	< 50	ug/L	
Phenanthrene	< 10	ug/L	
Phenol	< 10	ug/L	
Pyrene	< 10	ug/L	
1,2,4-Trichlorobenzene	< 10	ug/L	
2,4,5-Trichlorophenol	< 10	ug/L	
2,4,6-Trichlorophenol	< 10	ug/L	



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Sample Description:	GP-10	Time Taken:	10:00
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3510C/8081A/8082

Preparation Date: 04/07/00

Analysis Date: 04/11/00

Aldrin	< 0.05	ug/L
Aroclor 1016	< 0.5	ug/L
Aroclor 1221	< 0.5	ug/L
Aroclor 1232	< 0.5	ug/L
Aroclor 1242	< 0.5	ug/L
Aroclor 1248	< 0.5	ug/L
Aroclor 1254	< 1	ug/L
Aroclor 1260	< 1	ug/L
alpha-BHC	< 0.05	ug/L
beta-BHC	< 0.05	ug/L
delta-BHC	< 0.05	ug/L
Lindane (gamma-BHC)	< 0.05	ug/L
alpha-Chlordane	< 0.5	ug/L
gamma-Chlordane	< 0.5	ug/L
4,4'-DDD	< 0.1	ug/L
4,4'-DDE	< 0.1	ug/L
4,4-DDT	< 0.1	ug/L
Dieldrin	< 0.1	ug/L
Endosulfan I	< 0.05	ug/L
Endosulfan II	< 0.1	ug/L
Endosulfan sulfate	< 0.1	ug/L
Endrin	< 0.1	ug/L
Endrin aldehyde	< 0.1	ug/L
Endrin ketone	< 0.1	ug/L
Heptachlor	< 0.05	ug/L
Heptachlor epoxide	< 0.05	ug/L
Methoxychlor	< 0.5	ug/L
Toxaphene	< 1	ug/L



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Analytical Report

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Project ID:	#4917-410-0	Date Received:	04/06/00	
Sample Number:	95501	Date Taken:	04/05/00	
Sample Description:	GP-10	Time Taken:	10:00	
Lab File ID:	95500-05	Date Reported:	04/13/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.005	mg/L	04/11/00	9010B/9014
Aluminum	0.11	mg/L	04/11/00	3010A/6010B
Antimony	<0.01	mg/L	04/11/00	3010A/6010B
Arsenic	<0.002	mg/L	04/11/00	3010A/6010B
Barium	0.048	mg/L	04/11/00	3010A/6010B
Beryllium	<0.001	mg/L	04/11/00	3010A/6010B
Cadmium	<0.001	mg/L	04/11/00	3010A/6010B
Calcium	463	mg/L	04/11/00	3010A/6010B
Chromium	0.003	mg/L	04/11/00	3010A/6010B
Cobalt	0.010	mg/L	04/11/00	3010A/6010B
Copper	0.003	mg/L	04/11/00	3010A/6010B
Iron	1.21	mg/L	04/11/00	3010A/6010B
Lead	<0.002	mg/L	04/11/00	3010A/6010B
Magnesium	133	mg/L	04/11/00	3010A/6010B
Manganese	0.572	mg/L	04/11/00	3010A/6010B
Mercury	<0.0005	mg/L	04/07/00	7470A
Nickel	0.011	mg/L	04/11/00	3010A/6010B
Potassium	52.8	mg/L	04/13/00	3010A/6010B
Selenium	<0.002	mg/L	04/11/00	3010A/6010B
Silver	<0.001	mg/L	04/11/00	3010A/6010B
Sodium	82.2	mg/L	04/11/00	3010A/6010B
Thallium	<0.01	mg/L	04/11/00	3010A/6010B
Vanadium	<0.01	mg/L	04/11/00	3010A/6010B
Zinc	0.008	mg/L	04/11/00	3010A/6010B



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95502	Date Taken:	04/05/00
Sample Description:	GP-11	Time Taken:	11:15
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Volatile Organic Compounds Method 5030B/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/L
Benzene	< 5.0	ug/L
Bromodichloromethane	< 5.0	ug/L
Bromoform	< 5.0	ug/L
Bromomethane	< 10.0	ug/L
2-Butanone	< 10.0	ug/L
Carbon disulfide	< 5.0	ug/L
Carbon tetrachloride	< 5.0	ug/L
Chlorobenzene	< 5.0	ug/L
Chlorodibromomethane	< 5.0	ug/L
Chloroethane	< 10.0	ug/L
Chloroform	< 5.0	ug/L
Chloromethane	< 10.0	ug/L
1,1-Dichloroethane	< 5.0	ug/L
1,2-Dichloroethane	< 5.0	ug/L
1,1-Dichloroethene	< 5.0	ug/L
cis-1,2-Dichloroethene	< 5.0	ug/L
trans-1,2-Dichloroethene	< 5.0	ug/L
1,2-Dichloropropane	< 5.0	ug/L
cis-1,3-Dichloropropene	< 5.0	ug/L
trans-1,3-Dichloropropene	< 5.0	ug/L
Ethyl benzene	< 5.0	ug/L
2-Hexanone	< 10.0	ug/L
4-Methyl-2-pentanone	< 10.0	ug/L
Methylene chloride	< 5.0	ug/L
Styrene	< 5.0	ug/L
1,1,2,2-Tetrachloroethane	< 5.0	ug/L
Tetrachloroethene	< 5.0	ug/L



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Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95502	Date Taken:	04/05/00
Sample Description:	GP-11	Time Taken:	11:15
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Toluene	< 5.0	ug/L	
1,1,1-Trichloroethane	< 5.0	ug/L	
1,1,2-Trichloroethane	< 5.0	ug/L	
Trichloroethene	< 5.0	ug/L	
Vinyl Acetate	< 10.0	ug/L	
Vinyl Chloride	< 10.0	ug/L	
Xylenes (total)	< 5.0	ug/L	

Base-Neutral/Acid Compounds Method 3510C/8270C

Preparation Date: 04/07/00
Analysis Date: 04/10/00

Acenaphthene	< 10	ug/L
Acenaphthylene	< 10	ug/L
Anthracene	< 10	ug/L
Benzidine	< 10	ug/L
Benzo[a]anthracene	< 10	ug/L
Benzo[b]fluoranthene	< 10	ug/L
Benzo[k]fluoranthene	< 10	ug/L
Benzo[g,h,i]perylene	< 10	ug/L
Benzo[a]pyrene	< 10	ug/L
Benzoic Acid	< 50	ug/L
Benzyl Alcohol	< 20	ug/L
bis(2-chloroethoxy)methane	< 10	ug/L
bis(2-chloroethyl)ether	< 10	ug/L
bis(2-chloroisopropyl)ether	< 10	ug/L
bis(2-ethylhexyl)phthalate	< 10	ug/L
4-Bromophenyl-phenylether	< 10	ug/L
Butylbenzylphthalate	< 10	ug/L
4-Chloroaniline	< 10	ug/L
4-Chloro-3-methylphenol	< 20	ug/L



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IEPA Certification #100292

Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95502	Date Taken:	04/05/00
Sample Description:	GP-11	Time Taken:	11:15
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
2-Chloronaphthalene	< 10	ug/L	
2-Chlorophenol	< 10	ug/L	
4-Chlorophenyl-phenylether	< 10	ug/L	
Chrysene	< 10	ug/L	
Dibenz[a,h]anthracene	< 10	ug/L	
Dibenzofuran	< 10	ug/L	
1,2-Dichlorobenzene	< 10	ug/L	
1,3-Dichlorobenzene	< 10	ug/L	
1,4-Dichlorobenzene	< 10	ug/L	
3,3-Dichlorobenzidine	< 20	ug/L	
2,4-Dichlorophenol	< 10	ug/L	
Diethylphthalate	< 10	ug/L	
2,4-Dimethylphenol	< 10	ug/L	
Dimethylphthalate	< 10	ug/L	
Di-n-butylphthalate	< 10	ug/L	
4,6-Dinitro-2-methylphenol	< 50	ug/L	
2,4-Dinitrophenol	< 50	ug/L	
2,4-Dinitrotoluene	< 10	ug/L	
2,6-Dinitrotoluene	< 10	ug/L	
Di-n-octylphthalate	< 10	ug/L	
Fluoranthene	< 10	ug/L	
Fluorene	< 10	ug/L	
Hexachlorobenzene	< 10	ug/L	
Hexachlorobutadiene	< 10	ug/L	
Hexachlorocyclopentadiene	< 10	ug/L	
Hexachloroethane	< 10	ug/L	
Indeno[1,2,3-cd]pyrene	< 10	ug/L	
Isophorone	< 10	ug/L	
2-Methylnaphthalene	< 10	ug/L	
2-Methylphenol	< 10	ug/L	
3&4-Methylphenol	< 10	ug/L	



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95502	Date Taken:	04/05/00
Sample Description:	GP-11	Time Taken:	11:15
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Naphthalene	< 10	ug/L	
2-Nitroaniline	< 50	ug/L	
3-Nitroaniline	< 50	ug/L	
4-Nitroaniline	< 20	ug/L	
Nitrobenzene	< 10	ug/L	
2-Nitrophenol	< 10	ug/L	
4-Nitrophenol	< 50	ug/L	
N-Nitrosodimethylamine	< 10	ug/L	
N-Nitroso-di-n-propylamine	< 10	ug/L	
n-Nitrosodiphenylamine	< 10	ug/L	
Pentachlorophenol	< 50	ug/L	
Phenanthrene	< 10	ug/L	
Phenol	< 10	ug/L	
Pyrene	< 10	ug/L	
1,2,4-Trichlorobenzene	< 10	ug/L	
2,4,5-Trichlorophenol	< 10	ug/L	
2,4,6-Trichlorophenol	< 10	ug/L	



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95502	Date Taken:	04/05/00
Sample Description:	GP-11	Time Taken:	11:15
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3510C/8081A/8082

Preparation Date: 04/07/00

Analysis Date: 04/11/00

Aldrin	< 0.05	ug/L
Aroclor 1016	< 0.5	ug/L
Aroclor 1221	< 0.5	ug/L
Aroclor 1232	< 0.5	ug/L
Aroclor 1242	< 0.5	ug/L
Aroclor 1248	< 0.5	ug/L
Aroclor 1254	< 1	ug/L
Aroclor 1260	< 1	ug/L
alpha-BHC	< 0.05	ug/L
beta-BHC	< 0.05	ug/L
delta-BHC	< 0.05	ug/L
Lindane (gamma-BHC)	< 0.05	ug/L
alpha-Chlordane	< 0.5	ug/L
gamma-Chlordane	< 0.5	ug/L
4,4'-DDD	< 0.1	ug/L
4,4'-DDE	< 0.1	ug/L
4,4-DDT	< 0.1	ug/L
Dieldrin	< 0.1	ug/L
Endosulfan I	< 0.05	ug/L
Endosulfan II	< 0.1	ug/L
Endosulfan sulfate	< 0.1	ug/L
Endrin	< 0.1	ug/L
Endrin aldehyde	< 0.1	ug/L
Endrin ketone	< 0.1	ug/L
Heptachlor	< 0.05	ug/L
Heptachlor epoxide	< 0.05	ug/L
Methoxychlor	< 0.5	ug/L
Toxaphene	< 1	ug/L



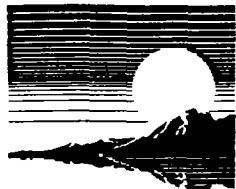
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Analytical Report

Client:	GAIATECH, Inc.			
Project ID:	#4917-410-0	Date Received:	04/06/00	
Sample Number:	95502	Date Taken:	04/05/00	
Sample Description:	GP-11	Time Taken:	11:15	
Lab File ID:	95500-05	Date Reported:	04/13/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.005	mg/L	04/11/00	9010B/9014
Aluminum	2.12	mg/L	04/11/00	3010A/6010B
Antimony	<0.01	mg/L	04/11/00	3010A/6010B
Arsenic	<0.002	mg/L	04/11/00	3010A/6010B
Barium	0.042	mg/L	04/11/00	3010A/6010B
Beryllium	<0.001	mg/L	04/11/00	3010A/6010B
Cadmium	<0.001	mg/L	04/11/00	3010A/6010B
Calcium	150	mg/L	04/11/00	3010A/6010B
Chromium	0.020	mg/L	04/11/00	3010A/6010B
Cobalt	0.004	mg/L	04/11/00	3010A/6010B
Copper	0.004	mg/L	04/11/00	3010A/6010B
Iron	4.96	mg/L	04/11/00	3010A/6010B
Lead	0.009	mg/L	04/11/00	3010A/6010B
Magnesium	60.5	mg/L	04/11/00	3010A/6010B
Manganese	0.444	mg/L	04/11/00	3010A/6010B
Mercury	<0.0005	mg/L	04/07/00	7470A
Nickel	0.006	mg/L	04/11/00	3010A/6010B
Potassium	22.1	mg/L	04/11/00	3010A/6010B
Selenium	<0.002	mg/L	04/11/00	3010A/6010B
Silver	<0.001	mg/L	04/11/00	3010A/6010B
Sodium	22.8	mg/L	04/11/00	3010A/6010B
Thallium	<0.01	mg/L	04/11/00	3010A/6010B
Vanadium	<0.01	mg/L	04/11/00	3010A/6010B
Zinc	0.018	mg/L	04/11/00	3010A/6010B



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95503	Date Taken:	04/05/00
Sample Description:	GP-14	Time Taken:	14:35
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Volatile Organic Compounds Method 5030B/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/L
Benzene	< 5.0	ug/L
Bromodichloromethane	< 5.0	ug/L
Bromoform	< 5.0	ug/L
Bromomethane	< 10.0	ug/L
2-Butanone	< 10.0	ug/L
Carbon disulfide	< 5.0	ug/L
Carbon tetrachloride	< 5.0	ug/L
Chlorobenzene	< 5.0	ug/L
Chlorodibromomethane	< 5.0	ug/L
Chloroethane	< 10.0	ug/L
Chloroform	< 5.0	ug/L
Chloromethane	< 10.0	ug/L
1,1-Dichloroethane	< 5.0	ug/L
1,2-Dichloroethane	< 5.0	ug/L
1,1-Dichloroethene	< 5.0	ug/L
cis-1,2-Dichloroethene	< 5.0	ug/L
trans-1,2-Dichloroethene	< 5.0	ug/L
1,2-Dichloropropane	< 5.0	ug/L
cis-1,3-Dichloropropene	< 5.0	ug/L
trans-1,3-Dichloropropene	< 5.0	ug/L
Ethyl benzene	< 5.0	ug/L
2-Hexanone	< 10.0	ug/L
4-Methyl-2-pentanone	< 10.0	ug/L
Methylene chloride	< 5.0	ug/L
Styrene	< 5.0	ug/L
1,1,2,2-Tetrachloroethane	< 5.0	ug/L
Tetrachloroethene	< 5.0	ug/L



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Sample Number:	95503	Date Taken:	04/05/00
Sample Description:	GP-14	Time Taken:	14:35
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Toluene	< 5.0	ug/L	
1,1,1-Trichloroethane	< 5.0	ug/L	
1,1,2-Trichloroethane	< 5.0	ug/L	
Trichloroethene	< 5.0	ug/L	
Vinyl Acetate	< 10.0	ug/L	
Vinyl Chloride	< 10.0	ug/L	
Xylenes (total)	< 5.0	ug/L	

Base-Neutral/Acid Compounds Method 3510C/8270C

Preparation Date: 04/07/00

Analysis Date: 04/10/00

Acenaphthene	< 10	ug/L
Acenaphthylene	< 10	ug/L
Anthracene	< 10	ug/L
Benzidine	< 10	ug/L
Benzo[a]anthracene	< 10	ug/L
Benzo[b]fluoranthene	< 10	ug/L
Benzo[k]fluoranthene	< 10	ug/L
Benzo[g,h,i]perylene	< 10	ug/L
Benzo[a]pyrene	< 10	ug/L
Benzoic Acid	< 50	ug/L
Benzyl Alcohol	< 20	ug/L
bis(2-chloroethoxy)methane	< 10	ug/L
bis(2-chloroethyl)ether	< 10	ug/L
bis(2-chloroisopropyl)ether	< 10	ug/L
bis(2-ethylhexyl)phthalate	< 10	ug/L
4-Bromophenyl-phenylether	< 10	ug/L
Butylbenzylphthalate	< 10	ug/L
4-Chloroaniline	< 10	ug/L
4-Chloro-3-methylphenol	< 20	ug/L



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Sample Number:	95503	Date Taken:	04/05/00
Sample Description:	GP-14	Time Taken:	14:35
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
2-Chloronaphthalene	< 10	ug/L	
2-Chlorophenol	< 10	ug/L	
4-Chlorophenyl-phenylether	< 10	ug/L	
Chrysene	< 10	ug/L	
Dibenz[a,h]anthracene	< 10	ug/L	
Dibenzofuran	< 10	ug/L	
1,2-Dichlorobenzene	< 10	ug/L	
1,3-Dichlorobenzene	< 10	ug/L	
1,4-Dichlorobenzene	< 10	ug/L	
3,3-Dichorobenzidine	< 20	ug/L	
2,4-Dichlorophenol	< 10	ug/L	
Diethylphthalate	< 10	ug/L	
2,4-Dimethylphenol	< 10	ug/L	
Dimethylphthalate	< 10	ug/L	
Di-n-butylphthalate	< 10	ug/L	
4,6-Dinitro-2-methylphenol	< 50	ug/L	
2,4-Dinitrophenol	< 50	ug/L	
2,4-Dinitrotoluene	< 10	ug/L	
2,6-Dinitrotoluene	< 10	ug/L	
Di-n-octylphthalate	< 10	ug/L	
Fluoranthene	< 10	ug/L	
Fluorene	< 10	ug/L	
Hexachlorobenzene	< 10	ug/L	
Hexachlorobutadiene	< 10	ug/L	
Hexachlorocyclopentadiene	< 10	ug/L	
Hexachloroethane	< 10	ug/L	
Indeno[1,2,3-cd]pyrene	< 10	ug/L	
Isophorone	< 10	ug/L	
2-Methylnaphthalene	< 10	ug/L	
2-Methylphenol	< 10	ug/L	
3&4-Methylphenol	< 10	ug/L	



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Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95503	Date Taken:	04/05/00
Sample Description:	GP-14	Time Taken:	14:35
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Naphthalene	< 10	ug/L	
2-Nitroaniline	< 50	ug/L	
3-Nitroaniline	< 50	ug/L	
4-Nitroaniline	< 20	ug/L	
Nitrobenzene	< 10	ug/L	
2-Nitrophenol	< 10	ug/L	
4-Nitrophenol	< 50	ug/L	
N-Nitrosodimethylamine	< 10	ug/L	
N-Nitroso-di-n-propylamine	< 10	ug/L	
n-Nitrosodiphenylamine	< 10	ug/L	
Pentachlorophenol	< 50	ug/L	
Phenanthrene	< 10	ug/L	
Phenol	< 10	ug/L	
Pyrene	< 10	ug/L	
1,2,4-Trichlorobenzene	< 10	ug/L	
2,4,5-Trichlorophenol	< 10	ug/L	
2,4,6-Trichlorophenol	< 10	ug/L	



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Sample Number:	95503	Date Taken:	04/05/00
Sample Description:	GP-14	Time Taken:	14:35
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3510C/8081A/8082

Preparation Date: 04/07/00

Analysis Date: 04/11/00

Aldrin	< 0.05	ug/L
Aroclor 1016	< 0.5	ug/L
Aroclor 1221	< 0.5	ug/L
Aroclor 1232	< 0.5	ug/L
Aroclor 1242	< 0.5	ug/L
Aroclor 1248	< 0.5	ug/L
Aroclor 1254	< 1	ug/L
Aroclor 1260	< 1	ug/L
alpha-BHC	< 0.05	ug/L
beta-BHC	< 0.05	ug/L
delta-BHC	< 0.05	ug/L
Lindane (gamma-BHC)	< 0.05	ug/L
alpha-Chlordane	< 0.5	ug/L
gamma-Chlordane	< 0.5	ug/L
4,4'-DDD	< 0.1	ug/L
4,4'-DDE	< 0.1	ug/L
4,4-DDT	< 0.1	ug/L
Dieldrin	< 0.1	ug/L
Endosulfan I	< 0.05	ug/L
Endosulfan II	< 0.1	ug/L
Endosulfan sulfate	< 0.1	ug/L
Endrin	< 0.1	ug/L
Endrin aldehyde	< 0.1	ug/L
Endrin ketone	< 0.1	ug/L
Heptachlor	< 0.05	ug/L
Heptachlor epoxide	< 0.05	ug/L
Methoxychlor	< 0.5	ug/L
Toxaphene	< 1	ug/L



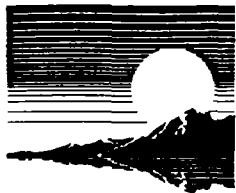
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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95503	Date Taken:	04/05/00
Sample Description:	GP-14	Time Taken:	14:35
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.005	mg/L	04/11/00	9010B/9014
Aluminum	0.48	mg/L	04/11/00	3010A/6010B
Antimony	<0.01	mg/L	04/11/00	3010A/6010B
Arsenic	0.005	mg/L	04/11/00	3010A/6010B
Barium	0.038	mg/L	04/11/00	3010A/6010B
Beryllium	<0.001	mg/L	04/11/00	3010A/6010B
Cadmium	<0.001	mg/L	04/11/00	3010A/6010B
Calcium	215	mg/L	04/11/00	3010A/6010B
Chromium	0.007	mg/L	04/11/00	3010A/6010B
Cobalt	0.004	mg/L	04/11/00	3010A/6010B
Copper	0.004	mg/L	04/11/00	3010A/6010B
Iron	1.92	mg/L	04/11/00	3010A/6010B
Lead	0.005	mg/L	04/11/00	3010A/6010B
Magnesium	48.8	mg/L	04/11/00	3010A/6010B
Manganese	0.505	mg/L	04/11/00	3010A/6010B
Mercury	<0.0005	mg/L	04/07/00	7470A
Nickel	0.006	mg/L	04/11/00	3010A/6010B
Potassium	9.6	mg/L	04/11/00	3010A/6010B
Selenium	0.018	mg/L	04/11/00	3010A/6010B
Silver	<0.001	mg/L	04/11/00	3010A/6010B
Sodium	59.5	mg/L	04/11/00	3010A/6010B
Thallium	<0.01	mg/L	04/11/00	3010A/6010B
Vanadium	<0.01	mg/L	04/11/00	3010A/6010B
Zinc	0.011	mg/L	04/11/00	3010A/6010B



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95504	Date Taken:	04/05/00
Sample Description:	GP-15	Time Taken:	15:32
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Volatile Organic Compounds Method 5030B/8260B

Analysis Date: 04/11/00

Acetone	< 10.0	ug/L
Benzene	< 5.0	ug/L
Bromodichloromethane	< 5.0	ug/L
Bromoform	< 5.0	ug/L
Bromomethane	< 10.0	ug/L
2-Butanone	< 10.0	ug/L
Carbon disulfide	< 5.0	ug/L
Carbon tetrachloride	< 5.0	ug/L
Chlorobenzene	< 5.0	ug/L
Chlorodibromomethane	< 5.0	ug/L
Chloroethane	< 10.0	ug/L
Chloroform	< 5.0	ug/L
Chloromethane	< 10.0	ug/L
1,1-Dichloroethane	< 5.0	ug/L
1,2-Dichloroethane	< 5.0	ug/L
1,1-Dichloroethene	< 5.0	ug/L
cis-1,2-Dichloroethene	< 5.0	ug/L
trans-1,2-Dichloroethene	< 5.0	ug/L
1,2-Dichloropropane	< 5.0	ug/L
cis-1,3-Dichloropropene	< 5.0	ug/L
trans-1,3-Dichloropropene	< 5.0	ug/L
Ethyl benzene	< 5.0	ug/L
2-Hexanone	< 10.0	ug/L
4-Methyl-2-pentanone	< 10.0	ug/L
Methylene chloride	< 5.0	ug/L
Styrene	< 5.0	ug/L
1,1,2,2-Tetrachloroethane	< 5.0	ug/L
Tetrachloroethene	< 5.0	ug/L



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Analytical Report

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Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95504	Date Taken:	04/05/00
Sample Description:	GP-15	Time Taken:	15:32
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Toluene	< 5.0	ug/L	
1,1,1-Trichloroethane	< 5.0	ug/L	
1,1,2-Trichloroethane	< 5.0	ug/L	
Trichloroethene	< 5.0	ug/L	
Vinyl Acetate	< 10.0	ug/L	
Vinyl Chloride	< 10.0	ug/L	
Xylenes (total)	< 5.0	ug/L	

Base-Neutral/Acid Compounds Method 3510C/8270C

Preparation Date: 04/07/00
Analysis Date: 04/10/00

Acenaphthene	< 10	ug/L
Acenaphthylene	< 10	ug/L
Anthracene	< 10	ug/L
Benzidine	< 10	ug/L
Benzo[a]anthracene	< 10	ug/L
Benzo[b]fluoranthene	< 10	ug/L
Benzo[k]fluoranthene	< 10	ug/L
Benzo[g,h,i]perylene	< 10	ug/L
Benzo[a]pyrene	< 10	ug/L
Benzoic Acid	< 50	ug/L
Benzyl Alcohol	< 20	ug/L
bis(2-chloroethoxy)methane	< 10	ug/L
bis(2-chloroethyl)ether	< 10	ug/L
bis(2-chloroisopropyl)ether	< 10	ug/L
bis(2-ethylhexyl)phthalate	< 10	ug/L
4-Bromophenyl-phenylether	< 10	ug/L
Butylbenzylphthalate	< 10	ug/L
4-Chloroaniline	< 10	ug/L
4-Chloro-3-methylphenol	< 20	ug/L



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IEPA Certification #100292

Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95504	Date Taken:	04/05/00
Sample Description:	GP-15	Time Taken:	15:32
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
2-Chloronaphthalene	< 10	ug/L	
2-Chlorophenol	< 10	ug/L	
4-Chlorophenyl-phenylether	< 10	ug/L	
Chrysene	< 10	ug/L	
Dibenz[a,h]anthracene	< 10	ug/L	
Dibenzofuran	< 10	ug/L	
1,2-Dichlorobenzene	< 10	ug/L	
1,3-Dichlorobenzene	< 10	ug/L	
1,4-Dichlorobenzene	< 10	ug/L	
3,3-Dichorobenzidine	< 20	ug/L	
2,4-Dichlorophenol	< 10	ug/L	
Diethylphthalate	< 10	ug/L	
2,4-Dimethylphenol	< 10	ug/L	
Dimethylphthalate	< 10	ug/L	
Di-n-butylphthalate	< 10	ug/L	
4,6-Dinitro-2-methylphenol	< 50	ug/L	
2,4-Dinitrophenol	< 50	ug/L	
2,4-Dinitrotoluene	< 10	ug/L	
2,6-Dinitrotoluene	< 10	ug/L	
Di-n-octylphthalate	< 10	ug/L	
Fluoranthene	< 10	ug/L	
Fluorene	< 10	ug/L	
Hexachlorobenzene	< 10	ug/L	
Hexachlorobutadiene	< 10	ug/L	
Hexachlorocyclopentadiene	< 10	ug/L	
Hexachloroethane	< 10	ug/L	
Indeno[1,2,3-cd]pyrene	< 10	ug/L	
Isophorone	< 10	ug/L	
2-Methylnaphthalene	< 10	ug/L	
2-Methylphenol	< 10	ug/L	
3&4-Methylphenol	< 10	ug/L	



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95504	Date Taken:	04/05/00
Sample Description:	GP-15	Time Taken:	15:32
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Naphthalene	< 10	ug/L	
2-Nitroaniline	< 50	ug/L	
3-Nitroaniline	< 50	ug/L	
4-Nitroaniline	< 20	ug/L	
Nitrobenzene	< 10	ug/L	
2-Nitrophenol	< 10	ug/L	
4-Nitrophenol	< 50	ug/L	
N-Nitrosodimethylamine	< 10	ug/L	
N-Nitroso-di-n-propylamine	< 10	ug/L	
n-Nitrosodiphenylamine	< 10	ug/L	
Pentachlorophenol	< 50	ug/L	
Phenanthrene	< 10	ug/L	
Phenol	< 10	ug/L	
Pyrene	< 10	ug/L	
1,2,4-Trichlorobenzene	< 10	ug/L	
2,4,5-Trichlorophenol	< 10	ug/L	
2,4,6-Trichlorophenol	< 10	ug/L	



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95504	Date Taken:	04/05/00
Sample Description:	GP-15	Time Taken:	15:32
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3510C/8081A/8082

Preparation Date: 04/07/00

Analysis Date: 04/11/00

Aldrin	< 0.05	ug/L
Aroclor 1016	< 0.5	ug/L
Aroclor 1221	< 0.5	ug/L
Aroclor 1232	< 0.5	ug/L
Aroclor 1242	< 0.5	ug/L
Aroclor 1248	< 0.5	ug/L
Aroclor 1254	< 1	ug/L
Aroclor 1260	< 1	ug/L
alpha-BHC	< 0.05	ug/L
beta-BHC	< 0.05	ug/L
delta-BHC	< 0.05	ug/L
Lindane (gamma-BHC)	< 0.05	ug/L
alpha-Chlordane	< 0.5	ug/L
gamma-Chlordane	< 0.5	ug/L
4,4'-DDD	< 0.1	ug/L
4,4'-DDE	< 0.1	ug/L
4,4-DDT	< 0.1	ug/L
Dieldrin	< 0.1	ug/L
Endosulfan I	< 0.05	ug/L
Endosulfan II	< 0.1	ug/L
Endosulfan sulfate	< 0.1	ug/L
Endrin	< 0.1	ug/L
Endrin aldehyde	< 0.1	ug/L
Endrin ketone	< 0.1	ug/L
Heptachlor	< 0.05	ug/L
Heptachlor epoxide	< 0.05	ug/L
Methoxychlor	< 0.5	ug/L
Toxaphene	< 1	ug/L



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Analytical Report

Client:	GAIATECH, Inc.			
Project ID:	#4917-410-0	Date Received:	04/06/00	
Sample Number:	95504	Date Taken:	04/05/00	
Sample Description:	GP-15	Time Taken:	15:32	
Lab File ID:	95500-05	Date Reported:	04/13/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.005	mg/L	04/11/00	9010B/9014
Aluminum	0.24	mg/L	04/11/00	3010A/6010B
Antimony	<0.01	mg/L	04/11/00	3010A/6010B
Arsenic	<0.002	mg/L	04/11/00	3010A/6010B
Barium	0.078	mg/L	04/11/00	3010A/6010B
Beryllium	<0.001	mg/L	04/11/00	3010A/6010B
Cadmium	<0.001	mg/L	04/11/00	3010A/6010B
Calcium	239	mg/L	04/11/00	3010A/6010B
Chromium	0.003	mg/L	04/11/00	3010A/6010B
Cobalt	0.007	mg/L	04/11/00	3010A/6010B
Copper	0.016	mg/L	04/11/00	3010A/6010B
Iron	1.15	mg/L	04/11/00	3010A/6010B
Lead	0.006	mg/L	04/11/00	3010A/6010B
Magnesium	193	mg/L	04/11/00	3010A/6010B
Manganese	0.11	mg/L	04/11/00	3010A/6010B
Mercury	<0.0005	mg/L	04/07/00	7470A
Nickel	0.011	mg/L	04/11/00	3010A/6010B
Potassium	40.8	mg/L	04/11/00	3010A/6010B
Selenium	0.005	mg/L	04/11/00	3010A/6010B
Silver	<0.001	mg/L	04/11/00	3010A/6010B
Sodium	445	mg/L	04/13/00	3010A/6010B
Thallium	<0.01	mg/L	04/11/00	3010A/6010B
Vanadium	<0.01	mg/L	04/11/00	3010A/6010B
Zinc	0.038	mg/L	04/11/00	3010A/6010B



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95505	Date Taken:	N/A
Sample Description:	Trip Blank	Time Taken:	N/A
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
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Volatile Organic Compounds Method 5030B/8260B

Analysis Date: 04/10/00

Acetone	< 10.0	ug/L
Benzene	< 5.0	ug/L
Bromodichloromethane	< 5.0	ug/L
Bromoform	< 5.0	ug/L
Bromomethane	< 10.0	ug/L
2-Butanone	< 10.0	ug/L
Carbon disulfide	< 5.0	ug/L
Carbon tetrachloride	< 5.0	ug/L
Chlorobenzene	< 5.0	ug/L
Chlorodibromomethane	< 5.0	ug/L
Chloroethane	< 10.0	ug/L
Chloroform	< 5.0	ug/L
Chloromethane	< 10.0	ug/L
1,1-Dichloroethane	< 5.0	ug/L
1,2-Dichloroethane	< 5.0	ug/L
1,1-Dichloroethene	< 5.0	ug/L
cis-1,2-Dichloroethene	< 5.0	ug/L
trans-1,2-Dichloroethene	< 5.0	ug/L
1,2-Dichloropropane	< 5.0	ug/L
cis-1,3-Dichloropropene	< 5.0	ug/L
trans-1,3-Dichloropropene	< 5.0	ug/L
Ethyl benzene	< 5.0	ug/L
2-Hexanone	< 10.0	ug/L
4-Methyl-2-pentanone	< 10.0	ug/L
Methylene chloride	< 5.0	ug/L
Styrene	< 5.0	ug/L
1,1,2,2-Tetrachloroethane	< 5.0	ug/L
Tetrachloroethene	< 5.0	ug/L



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/06/00
Sample Number:	95505	Date Taken:	N/A
Sample Description:	Trip Blank	Time Taken:	N/A
Lab File ID:	95500-05	Date Reported:	04/13/00

Analyte	Result	Units	Flags
Toluene	< 5.0	ug/L	
1,1,1-Trichloroethane	< 5.0	ug/L	
1,1,2-Trichloroethane	< 5.0	ug/L	
Trichloroethene	< 5.0	ug/L	
Vinyl Acetate	< 10.0	ug/L	
Vinyl Chloride	< 10.0	ug/L	
Xylenes (total)	< 5.0	ug/L	



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AFFIDAVIT OR RECORD

COMPANY NAME: Calatech Inc
ADDRESS: 1 North Franklin, Suite 2500, Chicago, IL
PHONE: 312 541 4200 FAX: 541-0340
CONTACT NAME: Larry Bertch
SAMPLED BY: Larry Bertch

Project I.D. 4917-460-0
Send Report To: Carry Bertsch

ANALYSES

Matrix Codes: S = Soil W = Water O = Other

Preserved in: Lab Field Cooler Temperature: 10 °C

Notes and Special Instructions: _____

Relinquished By: John Durr Date/Time 4/3/00 Received By: Patricia T. Jones Date/Time 4/10/00 2:00
Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____
Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____



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April 12, 2000

Mr. Larry Bertsch
GAIATECH INC.
1 North Franklin, Suite 2500
Chicago, IL 60606

Project ID: Grand-Ohio #4917-410-0
First Environmental File ID: 95352-55
Date Received: April 5th, 2000

Dear Mr. Bertsch:

These samples were analyzed as directed on the enclosed chain of custody.

All analyses were performed in accordance with methods from the USEPA publication Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition, December 1996. The actual method references are listed on the Analytical Report.

All analyses were performed within established holding times, and all Quality Control criteria as outlined in the methods have been met. QA/QC documentation and raw data will remain on file for future reference.

It has been a pleasure providing you with analytical services, and we look forward to working with you again in the future. If you have any questions regarding this report, or need additional information, please contact me at (630) 778-1200.

Sincerely,

Stan Zaworski
Project Manager



First Environmental Laboratories, Inc.

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IEPA Certification #100292

Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/05/00
Sample Number:	95352	Date Taken:	04/04/00
Sample Description:	GP-2	Time Taken:	10:10
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
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Volatile Organic Compounds Method 5030B/8260B

Analysis Date: 04/07/00

Acetone	< 10.0	ug/L
Benzene	< 5.0	ug/L
Bromodichloromethane	< 5.0	ug/L
Bromoform	< 5.0	ug/L
Bromomethane	< 10.0	ug/L
2-Butanone	< 10.0	ug/L
Carbon disulfide	< 5.0	ug/L
Carbon tetrachloride	< 5.0	ug/L
Chlorobenzene	< 5.0	ug/L
Chlorodibromomethane	< 5.0	ug/L
Chloroethane	< 10.0	ug/L
Chloroform	< 5.0	ug/L
Chloromethane	< 10.0	ug/L
1,1-Dichloroethane	< 5.0	ug/L
1,2-Dichloroethane	< 5.0	ug/L
1,1-Dichloroethene	< 5.0	ug/L
cis-1,2-Dichloroethene	< 5.0	ug/L
trans-1,2-Dichloroethene	< 5.0	ug/L
1,2-Dichloropropane	< 5.0	ug/L
cis-1,3-Dichloropropene	< 5.0	ug/L
trans-1,3-Dichloropropene	< 5.0	ug/L
Ethyl benzene	< 5.0	ug/L
2-Hexanone	< 10.0	ug/L
4-Methyl-2-pentanone	< 10.0	ug/L
Methylene chloride	< 5.0	ug/L
Styrene	< 5.0	ug/L
1,1,2,2-Tetrachloroethane	< 5.0	ug/L



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/05/00
Sample Number:	95352	Date Taken:	04/04/00
Sample Description:	GP-2	Time Taken:	10:10
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
Tetrachloroethene	< 5.0	ug/L	
Toluene	< 5.0	ug/L	
1,1,1-Trichloroethane	< 5.0	ug/L	
1,1,2-Trichloroethane	< 5.0	ug/L	
Trichloroethene	< 5.0	ug/L	
Vinyl Acetate	< 10.0	ug/L	
Vinyl Chloride	< 10.0	ug/L	
Xylenes (total)	< 5.0	ug/L	

Base-Neutral/Acid Compounds Method 3510C/8270C

Preparation Date: 04/06/00
Analysis Date: 04/06/00

Acenaphthene	< 10	ug/L
Acenaphthylene	< 10	ug/L
Anthracene	< 10	ug/L
Benzidine	< 10	ug/L
Benzo[a]anthracene	< 10	ug/L
Benzo[b]fluoranthene	< 10	ug/L
Benzo[k]fluoranthene	< 10	ug/L
Benzo[g,h,i]perylene	< 10	ug/L
Benzo[a]pyrene	< 10	ug/L
Benzoic Acid	< 50	ug/L
Benzyl Alcohol	< 20	ug/L
bis(2-chloroethoxy)methane	< 10	ug/L
bis(2-chloroethyl)ether	< 10	ug/L
bis(2-chloroisopropyl)ether	< 10	ug/L
bis(2-ethylhexyl)phthalate	< 10	ug/L
4-Bromophenyl-phenylether	< 10	ug/L
Butylbenzylphthalate	< 10	ug/L



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/05/00
Sample Number:	95352	Date Taken:	04/04/00
Sample Description:	GP-2	Time Taken:	10:10
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 10	ug/L	
4-Chloro-3-methylphenol	< 20	ug/L	
2-Chloronaphthalene	< 10	ug/L	
2-Chlorophenol	< 10	ug/L	
4-Chlorophenyl-phenylether	< 10	ug/L	
Chrysene	< 10	ug/L	
Dibenz[a,h]anthracene	< 10	ug/L	
Dibenzofuran	< 10	ug/L	
1,2-Dichlorobenzene	< 10	ug/L	
1,3-Dichlorobenzene	< 10	ug/L	
1,4-Dichlorobenzene	< 10	ug/L	
3,3-Dichlorobenzidine	< 20	ug/L	
2,4-Dichlorophenol	< 10	ug/L	
Diethylphthalate	< 10	ug/L	
2,4-Dimethylphenol	< 10	ug/L	
Dimethylphthalate	< 10	ug/L	
Di-n-butylphthalate	< 10	ug/L	
4,6-Dinitro-2-methylphenol	< 50	ug/L	
2,4-Dinitrophenol	< 50	ug/L	
2,4-Dinitrotoluene	< 10	ug/L	
2,6-Dinitrotoluene	< 10	ug/L	
Di-n-octylphthalate	< 10	ug/L	
Fluoranthene	< 10	ug/L	
Fluorene	< 10	ug/L	
Hexachlorobenzene	< 10	ug/L	
Hexachlorobutadiene	< 10	ug/L	
Hexachlorocyclopentadiene	< 10	ug/L	
Hexachloroethane	< 10	ug/L	
Indeno[1,2,3-cd]pyrene	< 10	ug/L	
Isophorone	< 10	ug/L	



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/05/00
Sample Number:	95352	Date Taken:	04/04/00
Sample Description:	GP-2	Time Taken:	10:10
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
2-Methylnaphthalene	< 10	ug/L	
2-Methylphenol	< 10	ug/L	
3&4-Methylphenol	< 10	ug/L	
Naphthalene	< 10	ug/L	
2-Nitroaniline	< 50	ug/L	
3-Nitroaniline	< 50	ug/L	
4-Nitroaniline	< 20	ug/L	
Nitrobenzene	< 10	ug/L	
2-Nitrophenol	< 10	ug/L	
4-Nitrophenol	< 50	ug/L	
N-Nitrosodimethylamine	< 10	ug/L	
N-Nitroso-di-n-propylamine	< 10	ug/L	
n-Nitrosodiphenylamine	< 10	ug/L	
Pentachlorophenol	< 50	ug/L	
Phenanthrene	< 10	ug/L	
Phenol	< 10	ug/L	
Pyrene	< 10	ug/L	
1,2,4-Trichlorobenzene	< 10	ug/L	
2,4,5-Trichlorophenol	< 10	ug/L	
2,4,6-Trichlorophenol	< 10	ug/L	



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/05/00
Sample Number:	95352	Date Taken:	04/04/00
Sample Description:	GP-2	Time Taken:	10:10
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
---------	--------	-------	-------

Pesticides/PCBs Method 3510C/8081A/8082

Preparation Date: 04/06/00
Analysis Date: 04/11/00

Aldrin	< 0.05	ug/L
Aroclor 1016	< 0.5	ug/L
Aroclor 1221	< 0.5	ug/L
Aroclor 1232	< 0.5	ug/L
Aroclor 1242	< 0.5	ug/L
Aroclor 1248	< 0.5	ug/L
Aroclor 1254	< 1	ug/L
Aroclor 1260	< 1	ug/L
alpha-BHC	< 0.05	ug/L
beta-BHC	< 0.05	ug/L
delta-BHC	< 0.05	ug/L
Lindane (gamma-BHC)	< 0.05	ug/L
alpha-Chlordane	< 0.5	ug/L
gamma-Chlordane	< 0.5	ug/L
4,4'-DDD	< 0.1	ug/L
4,4'-DDE	< 0.1	ug/L
4,4-DDT	< 0.1	ug/L
Dieldrin	< 0.1	ug/L
Endosulfan I	< 0.05	ug/L
Endosulfan II	< 0.1	ug/L
Endosulfan sulfate	< 0.1	ug/L
Endrin	< 0.1	ug/L
Endrin aldehyde	< 0.1	ug/L
Endrin ketone	< 0.1	ug/L
Heptachlor	< 0.05	ug/L
Heptachlor epoxide	< 0.05	ug/L
Methoxychlor	< 0.5	ug/L
Toxaphene	< 1	ug/L



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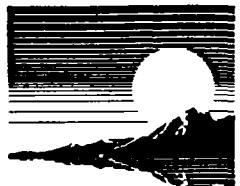
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Analytical Report

Client:	GAIATECH, Inc.			
Project ID:	#4917-410-0	Date Received:	04/05/00	
Sample Number:	95352	Date Taken:	04/04/00	
Sample Description:	GP-2	Time Taken:	10:10	
Lab File ID:	95352-55	Date Reported:	04/12/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.005	mg/L	04/06/00	9010B/9014
Aluminum	<0.05	mg/L	04/11/00	3010A/6010B
Antimony	<0.01	mg/L	04/11/00	3010A/6010B
Arsenic	<0.001	mg/L	04/11/00	3010A/6010B
Barium	0.061	mg/L	04/11/00	3010A/6010B
Beryllium	<0.001	mg/L	04/11/00	3010A/6010B
Cadmium	<0.001	mg/L	04/11/00	3010A/6010B
Calcium	110	mg/L	04/11/00	3010A/6010B
Chromium	0.004	mg/L	04/11/00	3010A/6010B
Cobalt	<0.001	mg/L	04/11/00	3010A/6010B
Copper	0.001	mg/L	04/11/00	3010A/6010B
Iron	2.87	mg/L	04/11/00	3010A/6010B
Lead	<0.002	mg/L	04/11/00	3010A/6010B
Magnesium	74.6	mg/L	04/11/00	3010A/6010B
Manganese	0.406	mg/L	04/11/00	3010A/6010B
Mercury	<0.0005	mg/L	04/07/00	7470A
Nickel	0.002	mg/L	04/11/00	3010A/6010B
Potassium	18.4	mg/L	04/11/00	3010A/6010B
Selenium	<0.002	mg/L	04/11/00	3010A/6010B
Silver	<0.001	mg/L	04/11/00	3010A/6010B
Sodium	286	mg/L	04/11/00	3010A/6010B
Thallium	<0.01	mg/L	04/11/00	3010A/6010B
Vanadium	<0.01	mg/L	04/11/00	3010A/6010B
Zinc	0.009	mg/L	04/11/00	3010A/6010B



**First
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IEPA Certification #100292

Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/05/00
Sample Number:	95353	Date Taken:	04/04/00
Sample Description:	GP-3	Time Taken:	11:25
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
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Volatile Organic Compounds Method 5030B/8260B

Analysis Date: 04/07/00

Acetone	< 10.0	ug/L
Benzene	< 5.0	ug/L
Bromodichloromethane	< 5.0	ug/L
Bromoform	< 5.0	ug/L
Bromomethane	< 10.0	ug/L
2-Butanone	< 10.0	ug/L
Carbon disulfide	< 5.0	ug/L
Carbon tetrachloride	< 5.0	ug/L
Chlorobenzene	< 5.0	ug/L
Chlorodibromomethane	< 5.0	ug/L
Chloroethane	< 10.0	ug/L
Chloroform	< 5.0	ug/L
Chloromethane	< 10.0	ug/L
1,1-Dichloroethane	< 5.0	ug/L
1,2-Dichloroethane	< 5.0	ug/L
1,1-Dichloroethene	< 5.0	ug/L
cis-1,2-Dichloroethene	< 5.0	ug/L
trans-1,2-Dichloroethene	< 5.0	ug/L
1,2-Dichloropropane	< 5.0	ug/L
cis-1,3-Dichloropropene	< 5.0	ug/L
trans-1,3-Dichloropropene	< 5.0	ug/L
Ethyl benzene	< 5.0	ug/L
2-Hexanone	< 10.0	ug/L
4-Methyl-2-pentanone	< 10.0	ug/L
Methylene chloride	< 5.0	ug/L
Styrene	< 5.0	ug/L
1,1,2,2-Tetrachloroethane	< 5.0	ug/L



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Project ID:	#4917-410-0	Date Received:	04/05/00
Sample Number:	95353	Date Taken:	04/04/00
Sample Description:	GP-3	Time Taken:	11:25
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
Tetrachloroethene	< 5.0	ug/L	
Toluene	< 5.0	ug/L	
1,1,1-Trichloroethane	< 5.0	ug/L	
1,1,2-Trichloroethane	< 5.0	ug/L	
Trichloroethene	< 5.0	ug/L	
Vinyl Acetate	< 10.0	ug/L	
Vinyl Chloride	< 10.0	ug/L	
Xylenes (total)	< 5.0	ug/L	

Base-Neutral/Acid Compounds Method 3510C/8270C

Preparation Date: 04/06/00
Analysis Date: 04/06/00

Acenaphthene	< 10	ug/L
Acenaphthylene	< 10	ug/L
Anthracene	< 10	ug/L
Benzidine	< 10	ug/L
Benzo[a]anthracene	< 10	ug/L
Benzo[b]fluoranthene	< 10	ug/L
Benzo[k]fluoranthene	< 10	ug/L
Benzo[g,h,i]perylene	< 10	ug/L
Benzo[a]pyrene	< 10	ug/L
Benzoic Acid	< 50	ug/L
Benzyl Alcohol	< 20	ug/L
bis(2-chloroethoxy)methane	< 10	ug/L
bis(2-chloroethyl)ether	< 10	ug/L
bis(2-chloroisopropyl)ether	< 10	ug/L
bis(2-ethylhexyl)phthalate	< 10	ug/L
4-Bromophenyl-phenylether	< 10	ug/L
Butylbenzylphthalate	< 10	ug/L



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Project ID:	#4917-410-0	Date Received:	04/05/00
Sample Number:	95353	Date Taken:	04/04/00
Sample Description:	GP-3	Time Taken:	11:25
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 10	ug/L	
4-Chloro-3-methylphenol	< 20	ug/L	
2-Chloronaphthalene	< 10	ug/L	
2-Chlorophenol	< 10	ug/L	
4-Chlorophenyl-phenylether	< 10	ug/L	
Chrysene	< 10	ug/L	
Dibenz[a,h]anthracene	< 10	ug/L	
Dibenzofuran	< 10	ug/L	
1,2-Dichlorobenzene	< 10	ug/L	
1,3-Dichlorobenzene	< 10	ug/L	
1,4-Dichlorobenzene	< 10	ug/L	
3,3-Dichorobenzidine	< 20	ug/L	
2,4-Dichlorophenol	< 10	ug/L	
Diethylphthalate	< 10	ug/L	
2,4-Dimethylphenol	< 10	ug/L	
Dimethylphthalate	< 10	ug/L	
Di-n-butylphthalate	< 10	ug/L	
4,6-Dinitro-2-methylphenol	< 50	ug/L	
2,4-Dinitrophenol	< 50	ug/L	
2,4-Dinitrotoluene	< 10	ug/L	
2,6-Dinitrotoluene	< 10	ug/L	
Di-n-octylphthalate	< 10	ug/L	
Fluoranthene	< 10	ug/L	
Fluorene	< 10	ug/L	
Hexachlorobenzene	< 10	ug/L	
Hexachlorobutadiene	< 10	ug/L	
Hexachlorocyclopentadiene	< 10	ug/L	
Hexachloroethane	< 10	ug/L	
Indeno[1,2,3-cd]pyrene	< 10	ug/L	
Isophorone	< 10	ug/L	



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Sample Number:	95353	Date Taken:	04/04/00
Sample Description:	GP-3	Time Taken:	11:25
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
2-Methylnaphthalene	< 10	ug/L	
2-Methylphenol	< 10	ug/L	
3&4-Methylphenol	< 10	ug/L	
Naphthalene	< 10	ug/L	
2-Nitroaniline	< 50	ug/L	
3-Nitroaniline	< 50	ug/L	
4-Nitroaniline	< 20	ug/L	
Nitrobenzene	< 10	ug/L	
2-Nitrophenol	< 10	ug/L	
4-Nitrophenol	< 50	ug/L	
N-Nitrosodimethylamine	< 10	ug/L	
N-Nitroso-di-n-propylamine	< 10	ug/L	
n-Nitrosodiphenylamine	< 10	ug/L	
Pentachlorophenol	< 50	ug/L	
Phenanthrene	< 10	ug/L	
Phenol	< 10	ug/L	
Pyrene	< 10	ug/L	
1,2,4-Trichlorobenzene	< 10	ug/L	
2,4,5-Trichlorophenol	< 10	ug/L	
2,4,6-Trichlorophenol	< 10	ug/L	



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Sample Number:	95353	Date Taken:	04/04/00
Sample Description:	GP-3	Time Taken:	11:25
Lab File ID:	95352-55	Date Reported:	04/12/00

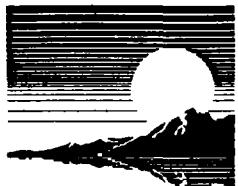
Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3510C/8081A/8082

Preparation Date: 04/06/00

Analysis Date: 04/11/00

Aldrin	< 0.05	ug/L
Aroclor 1016	< 0.5	ug/L
Aroclor 1221	< 0.5	ug/L
Aroclor 1232	< 0.5	ug/L
Aroclor 1242	< 0.5	ug/L
Aroclor 1248	< 0.5	ug/L
Aroclor 1254	< 1	ug/L
Aroclor 1260	< 1	ug/L
alpha-BHC	< 0.05	ug/L
beta-BHC	< 0.05	ug/L
delta-BHC	< 0.05	ug/L
Lindane (gamma-BHC)	< 0.05	ug/L
alpha-Chlordane	< 0.5	ug/L
gamma-Chlordane	< 0.5	ug/L
4,4'-DDD	< 0.1	ug/L
4,4'-DDE	< 0.1	ug/L
4,4-DDT	< 0.1	ug/L
Dieldrin	< 0.1	ug/L
Endosulfan I	< 0.05	ug/L
Endosulfan II	< 0.1	ug/L
Endosulfan sulfate	< 0.1	ug/L
Endrin	< 0.1	ug/L
Endrin aldehyde	< 0.1	ug/L
Endrin ketone	< 0.1	ug/L
Heptachlor	< 0.05	ug/L
Heptachlor epoxide	< 0.05	ug/L
Methoxychlor	< 0.5	ug/L
Toxaphene	< 1	ug/L



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Project ID:	#4917-410-0	Date Received:	04/05/00	
Sample Number:	95353	Date Taken:	04/04/00	
Sample Description:	GP-3	Time Taken:	11:25	
Lab File ID:	95352-55	Date Reported:	04/12/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.005	mg/L	04/06/00	9010B/9014
Aluminum	<0.05	mg/L	04/11/00	3010A/6010B
Antimony	<0.01	mg/L	04/11/00	3010A/6010B
Arsenic	0.004	mg/L	04/11/00	3010A/6010B
Barium	0.092	mg/L	04/11/00	3010A/6010B
Beryllium	<0.001	mg/L	04/11/00	3010A/6010B
Cadmium	<0.001	mg/L	04/11/00	3010A/6010B
Calcium	226	mg/L	04/11/00	3010A/6010B
Chromium	0.001	mg/L	04/11/00	3010A/6010B
Cobalt	<0.001	mg/L	04/11/00	3010A/6010B
Copper	0.002	mg/L	04/11/00	3010A/6010B
Iron	0.36	mg/L	04/11/00	3010A/6010B
Lead	<0.002	mg/L	04/11/00	3010A/6010B
Magnesium	245	mg/L	04/11/00	3010A/6010B
Manganese	0.462	mg/L	04/11/00	3010A/6010B
Mercury	<0.0005	mg/L	04/07/00	7470A
Nickel	0.002	mg/L	04/11/00	3010A/6010B
Potassium	26.9	mg/L	04/11/00	3010A/6010B
Selenium	<0.002	mg/L	04/11/00	3010A/6010B
Silver	<0.001	mg/L	04/11/00	3010A/6010B
Sodium	176	mg/L	04/11/00	3010A/6010B
Thallium	<0.01	mg/L	04/11/00	3010A/6010B
Vanadium	<0.01	mg/L	04/11/00	3010A/6010B
Zinc	0.006	mg/L	04/11/00	3010A/6010B



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Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/05/00
Sample Number:	95354	Date Taken:	04/04/00
Sample Description:	GP-7	Time Taken:	15:45
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
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Volatile Organic Compounds Method 5030B/8260B

Analysis Date: 04/07/00

Acetone	< 10.0	ug/L
Benzene	< 5.0	ug/L
Bromodichloromethane	< 5.0	ug/L
Bromoform	< 5.0	ug/L
Bromomethane	< 10.0	ug/L
2-Butanone	< 10.0	ug/L
Carbon disulfide	< 5.0	ug/L
Carbon tetrachloride	< 5.0	ug/L
Chlorobenzene	< 5.0	ug/L
Chlorodibromomethane	< 5.0	ug/L
Chloroethane	< 10.0	ug/L
Chloroform	< 5.0	ug/L
Chloromethane	< 10.0	ug/L
1,1-Dichloroethane	< 5.0	ug/L
1,2-Dichloroethane	< 5.0	ug/L
1,1-Dichloroethene	< 5.0	ug/L
cis-1,2-Dichloroethene	< 5.0	ug/L
trans-1,2-Dichloroethene	< 5.0	ug/L
1,2-Dichloropropane	< 5.0	ug/L
cis-1,3-Dichloropropene	< 5.0	ug/L
trans-1,3-Dichloropropene	< 5.0	ug/L
Ethyl benzene	< 5.0	ug/L
2-Hexanone	< 10.0	ug/L
4-Methyl-2-pentanone	< 10.0	ug/L
Methylene chloride	< 5.0	ug/L
Styrene	< 5.0	ug/L
1,1,2,2-Tetrachloroethane	< 5.0	ug/L



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Sample Number:	95354	Date Taken:	04/04/00
Sample Description:	GP-7	Time Taken:	15:45
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
Tetrachloroethene	< 5.0	ug/L	
Toluene	< 5.0	ug/L	
1,1,1-Trichloroethane	< 5.0	ug/L	
1,1,2-Trichloroethane	< 5.0	ug/L	
Trichloroethene	< 5.0	ug/L	
Vinyl Acetate	< 10.0	ug/L	
Vinyl Chloride	< 10.0	ug/L	
Xylenes (total)	< 5.0	ug/L	

Base-Neutral/Acid Compounds Method 3510C/8270C

Preparation Date: 04/06/00
Analysis Date: 04/06/00

Acenaphthene	< 10	ug/L
Acenaphthylene	< 10	ug/L
Anthracene	< 10	ug/L
Benzidine	< 10	ug/L
Benzo[a]anthracene	< 10	ug/L
Benzo[b]fluoranthene	< 10	ug/L
Benzo[k]fluoranthene	< 10	ug/L
Benzo[g,h,i]perylene	< 10	ug/L
Benzo[a]pyrene	< 10	ug/L
Benzoic Acid	< 50	ug/L
Benzyl Alcohol	< 20	ug/L
bis(2-chloroethoxy)methane	< 10	ug/L
bis(2-chloroethyl)ether	< 10	ug/L
bis(2-chloroisopropyl)ether	< 10	ug/L
bis(2-ethylhexyl)phthalate	< 10	ug/L
4-Bromophenyl-phenylether	< 10	ug/L
Butylbenzylphthalate	< 10	ug/L



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Sample Description:	GP-7	Time Taken:	15:45
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
4-Chloroaniline	< 10	ug/L	
4-Chloro-3-methylphenol	< 20	ug/L	
2-Chloronaphthalene	< 10	ug/L	
2-Chlorophenol	< 10	ug/L	
4-Chlorophenyl-phenylether	< 10	ug/L	
Chrysene	< 10	ug/L	
Dibenz[a,h]anthracene	< 10	ug/L	
Dibenzofuran	< 10	ug/L	
1,2-Dichlorobenzene	< 10	ug/L	
1,3-Dichlorobenzene	< 10	ug/L	
1,4-Dichlorobenzene	< 10	ug/L	
3,3-Dichlorobenzidine	< 20	ug/L	
2,4-Dichlorophenol	< 10	ug/L	
Diethylphthalate	< 10	ug/L	
2,4-Dimethylphenol	< 10	ug/L	
Dimethylphthalate	< 10	ug/L	
Di-n-butylphthalate	< 10	ug/L	
4,6-Dinitro-2-methylphenol	< 50	ug/L	
2,4-Dinitrophenol	< 50	ug/L	
2,4-Dinitrotoluene	< 10	ug/L	
2,6-Dinitrotoluene	< 10	ug/L	
Di-n-octylphthalate	< 10	ug/L	
Fluoranthene	< 10	ug/L	
Fluorene	< 10	ug/L	
Hexachlorobenzene	< 10	ug/L	
Hexachlorobutadiene	< 10	ug/L	
Hexachlorocyclopentadiene	< 10	ug/L	
Hexachloroethane	< 10	ug/L	
Indeno[1,2,3-cd]pyrene	< 10	ug/L	
Isophorone	< 10	ug/L	



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Sample Number:	95354	Date Taken:	04/04/00
Sample Description:	GP-7	Time Taken:	15:45
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
2-Methylnaphthalene	< 10	ug/L	
2-Methylphenol	< 10	ug/L	
3&4-Methylphenol	< 10	ug/L	
Naphthalene	< 10	ug/L	
2-Nitroaniline	< 50	ug/L	
3-Nitroaniline	< 50	ug/L	
4-Nitroaniline	< 20	ug/L	
Nitrobenzene	< 10	ug/L	
2-Nitrophenol	< 10	ug/L	
4-Nitrophenol	< 50	ug/L	
N-Nitrosodimethylamine	< 10	ug/L	
N-Nitroso-di-n-propylamine	< 10	ug/L	
n-Nitrosodiphenylamine	< 10	ug/L	
Pentachlorophenol	< 50	ug/L	
Phenanthrene	< 10	ug/L	
Phenol	< 10	ug/L	
Pyrene	< 10	ug/L	
1,2,4-Trichlorobenzene	< 10	ug/L	
2,4,5-Trichlorophenol	< 10	ug/L	
2,4,6-Trichlorophenol	< 10	ug/L	



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Lab File ID:	95352-55	Date Reported:	04/12/00

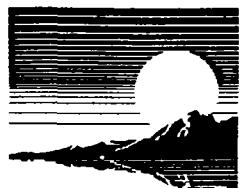
Analyte	Result	Units	Flags
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Pesticides/PCBs Method 3510C/8081A/8082

Preparation Date: 04/06/00

Analysis Date: 04/11/00

Aldrin	< 0.05	ug/L
Aroclor 1016	< 0.5	ug/L
Aroclor 1221	< 0.5	ug/L
Aroclor 1232	< 0.5	ug/L
Aroclor 1242	< 0.5	ug/L
Aroclor 1248	< 0.5	ug/L
Aroclor 1254	< 1	ug/L
Aroclor 1260	< 1	ug/L
alpha-BHC	< 0.05	ug/L
beta-BHC	< 0.05	ug/L
delta-BHC	< 0.05	ug/L
Lindane (gamma-BHC)	< 0.05	ug/L
alpha-Chlordane	< 0.5	ug/L
gamma-Chlordane	< 0.5	ug/L
4,4'-DDD	< 0.1	ug/L
4,4'-DDE	< 0.1	ug/L
4,4-DDT	< 0.1	ug/L
Dieldrin	< 0.1	ug/L
Endosulfan I	< 0.05	ug/L
Endosulfan II	< 0.1	ug/L
Endosulfan sulfate	< 0.1	ug/L
Endrin	< 0.1	ug/L
Endrin aldehyde	< 0.1	ug/L
Endrin ketone	< 0.1	ug/L
Heptachlor	< 0.05	ug/L
Heptachlor epoxide	< 0.05	ug/L
Methoxychlor	< 0.5	ug/L
Toxaphene	< 1	ug/L



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Sample Number:	95354	Date Taken:	04/04/00	
Sample Description:	GP-7	Time Taken:	15:45	
Lab File ID:	95352-55	Date Reported:	04/12/00	

Analyte	Result	Units	Date Analyzed	Method
Cyanide	<0.005	mg/L	04/06/00	9010B/9014
Aluminum	2.29	mg/L	04/11/00	3010A/6010B
Antimony	0.01	mg/L	04/11/00	3010A/6010B
Arsenic	0.002	mg/L	04/11/00	3010A/6010B
Barium	0.131	mg/L	04/11/00	3010A/6010B
Beryllium	<0.001	mg/L	04/11/00	3010A/6010B
Cadmium	<0.001	mg/L	04/11/00	3010A/6010B
Calcium	426	mg/L	04/11/00	3010A/6010B
Chromium	0.067	mg/L	04/11/00	3010A/6010B
Cobalt	0.015	mg/L	04/11/00	3010A/6010B
Copper	0.020	mg/L	04/11/00	3010A/6010B
Iron	7.35	mg/L	04/11/00	3010A/6010B
Lead	0.006	mg/L	04/11/00	3010A/6010B
Magnesium	45.0	mg/L	04/11/00	3010A/6010B
Manganese	1.39	mg/L	04/11/00	3010A/6010B
Mercury	<0.0005	mg/L	04/11/00	7470A
Nickel	0.257	mg/L	04/11/00	3010A/6010B
Potassium	7.3	mg/L	04/11/00	3010A/6010B
Selenium	<0.002	mg/L	04/11/00	3010A/6010B
Silver	<0.001	mg/L	04/11/00	3010A/6010B
Sodium	69.2	mg/L	04/11/00	3010A/6010B
Thallium	<0.01	mg/L	04/11/00	3010A/6010B
Vanadium	<0.01	mg/L	04/11/00	3010A/6010B
Zinc	0.100	mg/L	04/11/00	3010A/6010B



First Environmental Laboratories, Inc.

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IEPA Certification #100292

Analytical Report

Client:	GAIATECH, Inc.		
Project ID:	#4917-410-0	Date Received:	04/05/00
Sample Number:	95355	Date Taken:	N/A
Sample Description:	Trip Blank	Time Taken:	N/A
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
---------	--------	-------	-------

Volatile Organic Compounds Method 5030B/8260B

Analysis Date: 04/07/00

Acetone	< 10.0	ug/L
Benzene	< 5.0	ug/L
Bromodichloromethane	< 5.0	ug/L
Bromoform	< 5.0	ug/L
Bromomethane	< 10.0	ug/L
2-Butanone	< 10.0	ug/L
Carbon disulfide	< 5.0	ug/L
Carbon tetrachloride	< 5.0	ug/L
Chlorobenzene	< 5.0	ug/L
Chlorodibromomethane	< 5.0	ug/L
Chloroethane	< 10.0	ug/L
Chloroform	< 5.0	ug/L
Chloromethane	< 10.0	ug/L
1,1-Dichloroethane	< 5.0	ug/L
1,2-Dichloroethane	< 5.0	ug/L
1,1-Dichloroethene	< 5.0	ug/L
cis-1,2-Dichloroethene	< 5.0	ug/L
trans-1,2-Dichloroethene	< 5.0	ug/L
1,2-Dichloropropane	< 5.0	ug/L
cis-1,3-Dichloropropene	< 5.0	ug/L
trans-1,3-Dichloropropene	< 5.0	ug/L
Ethyl benzene	< 5.0	ug/L
2-Hexanone	< 10.0	ug/L
4-Methyl-2-pentanone	< 10.0	ug/L
Methylene chloride	< 5.0	ug/L
Styrene	< 5.0	ug/L
1,1,2,2-Tetrachloroethane	< 5.0	ug/L



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Project ID:	#4917-410-0	Date Received:	04/05/00
Sample Number:	95355	Date Taken:	N/A
Sample Description:	Trip Blank	Time Taken:	N/A
Lab File ID:	95352-55	Date Reported:	04/12/00

Analyte	Result	Units	Flags
Tetrachloroethene	< 5.0	ug/L	
Toluene	< 5.0	ug/L	
1,1,1-Trichloroethane	< 5.0	ug/L	
1,1,2-Trichloroethane	< 5.0	ug/L	
Trichloroethene	< 5.0	ug/L	
Vinyl Acetate	< 10.0	ug/L	
Vinyl Chloride	< 10.0	ug/L	
Xylenes (total)	< 5.0	ug/L	



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E-mail: firstenv@mcs.com
IEPA Certification #100292**

AN FC GOL REC 'D

COMPANY NAME: Garatech INC.
ADDRESS: 1 north franklin, suite 2500, Chicago, IL
PHONE: 312-541-4200 FAX: 541-2340
CONTACT NAME: Larry Bertsch
SAMPLER BY: Larry Bertsch / Yone Berto

ANALYSES

Project I.D. Grand-Ohio # 4417-410-0
Send Report To: Larry Bertsch

Matrix Codes: S = Soil W = Water O = Other

Preserved in: Lab Field Cooler Temperatures 5 °C

Notes and Special Instructions: _____

Relinquished By: Jamel Bush Date/Time 4/4/00 Received By: Helen Nance Date/Time 4/5/00 1:30
Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____
Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____

Appendix D

Physical Soil Analytical Reports

**SCHLEEDE
HAMPTON
ASSOCIATES** INC
CONSULTING ENGINEERS

April 26, 2000

Mr. Larry Bertsch
GaiaTech Inc.,
1 North Franklin, Suite 2500
Chicago, Illinois 60606

Re: **Laboratory Testing Services**
Time-Life Property
GaiaTech Project No. 4917-410-0
SHA File No. 70247

Dear Mr. Bertsch:

Schleede-Hampton Associates, Inc. has completed the laboratory testing on materials submitted for the above referenced project. The samples were delivered to our facilities on April 7, 2000.

Laboratory Test Methods

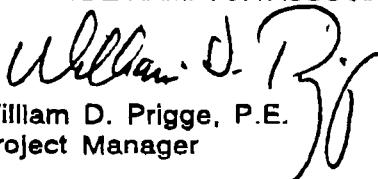
The samples were tested in accordance with the following standard methods of test:

Moisture Content Determination	ASTM D 2216
Grain Size Analysis	ASTM D 422
Bulk Density Determination	ASTM D 2937
Constant Head Permeability	ASTM D 2434
Specific Gravity of Soils	ASTM D 854
pH of Soils	ASTM D 4972
Total Organic Content	EPA Method 9060

Results of the laboratory testing are summarized on the attached Table 1. Laboratory test data is attached.

Thank you for the opportunity to be of service. If you have any questions regarding the test data, please do not hesitate to contact us.

Very truly yours,
SCHLEEDE-HAMPTON ASSOCIATES, INC.


William D. Prigge, P.E.
Project Manager

WDP/dsc
Attachments

FROM /
REPLY
TO:

102 WEST ILLINOIS STREET, SUITE D
 ST. CHARLES, ILLINOIS 60174
630-377-3270 • FAX: 630-377-3585

1612 LANDMEIER ROAD, UNIT C
ELK GROVE VILLAGE, ILLINOIS 60007
847-228-1079 • FAX: 847-228-0633

4041 ALBANY STREET, UNIT 4
 McHENRY, ILLINOIS 60050
815-385-8351 • FAX: 815-385-8456

**SCHLEEDE HAMPTON ASSOCIATES, INC.
CONSULTING ENGINEERS**

CLIENT: Gaia Tech, Inc.

**Time-Life Property
LAB SUMMARY**

SHA FILE NO. 70247

Boring No.	Depth	Moisture Content	Bulk Density	Specific Gravity	pH	Total Organic Content mg/kg	%	Permeability cm/sec
GP-10	11' to 12'	4.30%	128.2pcf	2.717	8.6	6350	0.6	
GP-10	14' to 16'							2.38E-03

Table 1

SCHLEEDE - HAMPTON ASSOCIATES, INC.**CONSULTING ENGINEERS**

1612 LANDMEIER ROAD, SUITE C, ELK GROVE VILLAGE, ILLINOIS 60007 (847) 228-1079

HYDROMETER/COMBINED ANALYSIS

TestUniqueID: 1955

Project Name: Time-Life Property

ProjectID: 70247

Date: 4/11/2000

Boring No. GP-10

Sample No. 0

Depth: 11-12

Test No. 1

Total Sample Wt.: 189.3

	Sieve Size	Cum Wt. Ret	% Retaining	% Passing	Total Passing %	Dia (mm)
Sieve Portion.	+#10	1	0.0	100.0	100.0	25.0000
	3/4	0.0	0.0	100.0	100.0	19.0000
	1/2	0.0	0.0	100.0	100.0	12.5000
	3/8	2.0	1.0	99.0	99.0	9.5000
	No.4	6.0	3.2	96.8	96.8	4.7500
Sieve Portion.	No.10	12.8	6.8	93.2	93.2	2.0000
	No.20	5.4	5.3	94.7	88.3	0.8500
	No.40	15.1	15.0	85.0	79.2	0.4200
	No.100	89.8	89.3	10.7	10.0	0.1500
	No.200	96.8	96.3	3.7	3.4	0.0750

Wt of Sample at Start of Hydrometer : 100.6

Temperature (C): 20.6

Temp Bath Bulb Reading: 6.0

Specific Gravity: 2.72

Hydrometer Portion.	Elaps. Time (min)	Uncorrected	Corrected	% Passing	Total Passing %	Dia (mm)
	1	7.5	1.5	1.5	1.4	0.0519
	2	7.5	1.5	1.5	1.4	0.0387
	5	7.5	1.5	1.5	1.4	0.0232
	15	7.5	1.5	1.5	1.4	0.0134
	30	7.0	1.0	1.0	0.9	0.0095
	60	6.5	0.5	0.5	0.5	0.0067
	120	6.5	0.5	0.5	0.5	0.0048
	250	6.5	0.5	0.5	0.5	0.0033
	1440	6.0	0.0	0.0	0.0	0.0014

LL : 0 PL: 0 PI: 0 Organic : No

Gravel : 3 Sand : 93 Silt : 3 Clay : 0

Cu: 2.3 Cc: 1.0 D10: 0.1498 D30: 0.228 D60: 0.345

Unified Classification: SAND, Trace Gravel, Trace Silt, SP

04/27/2000 09:00

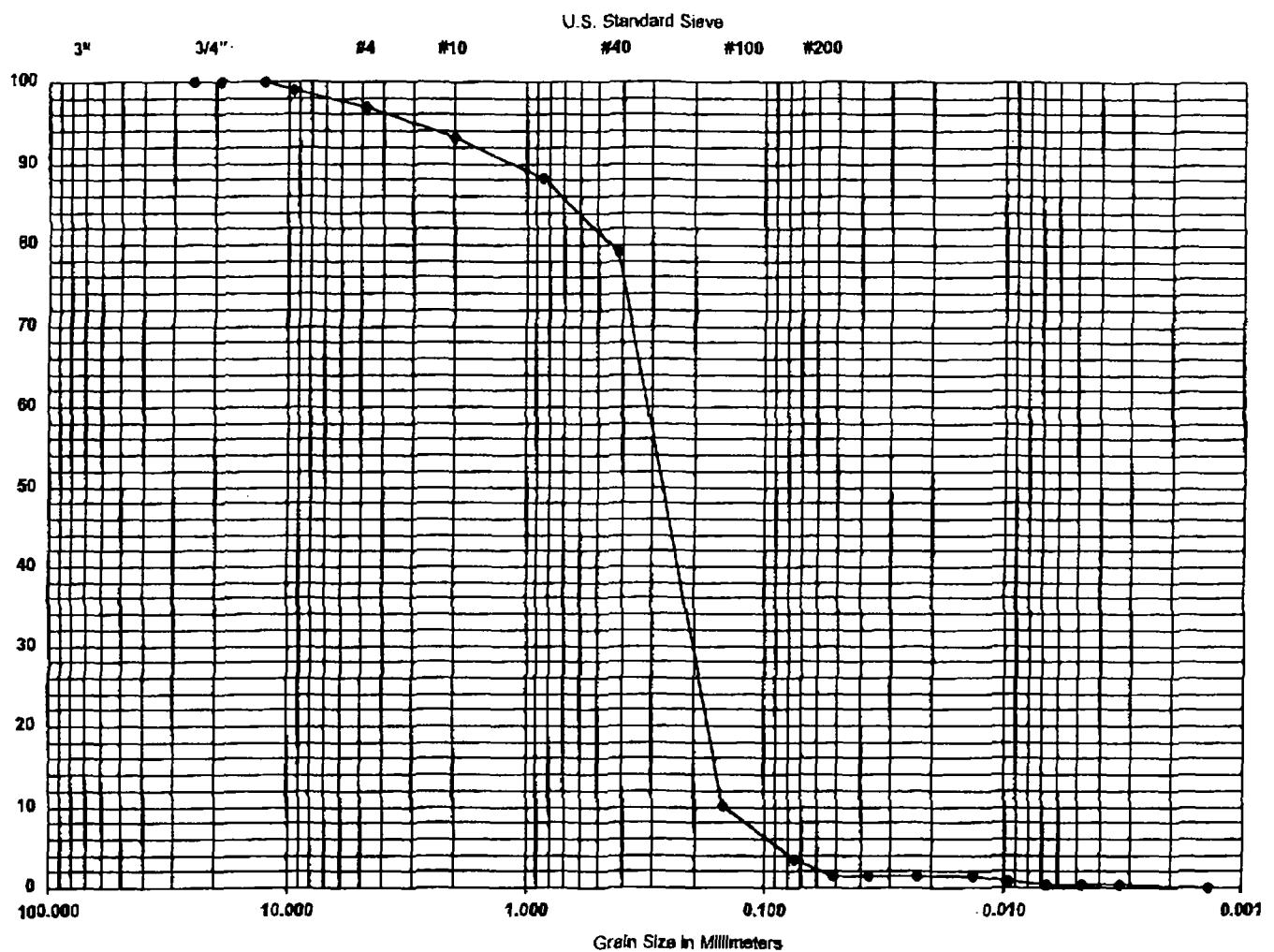
8472280633

SHAEJV

PAGE 05/07

REPORT OF GRAIN SIZE ANALYSIS

SCHLEEDE-HAMPTON ASSOCIATES, INC.



GRAVEL		SAND			SILT OR CLAY		
coarse	fine	coarse	medium	fine			

Boring No.: GP-10 Sample No.: 0 Depth: 11-12 LL%: 0 PL %: 0 PI %: 0
 Gravel: 3 Sand: 93 Silt: 3 Clay: 0 Cu: 2.3 Cc: 1.0 Dia10: 0.15 Dia30: 0.228 Dia60: 0.345

Unified Classification: SAND, Trace Gravel, Trace Silt, SP

Project Name: Time-Life Property

Client: GaiaTech, Inc.

ProjectID: 70247

SCHLEEDE-HAMPTON ASSOCIATES, INC.
PERMEABILITY WORKSHEET

PROJECT: Time-Life Property

PROJ NO. 70247 DATE: 4/11/00

SOIL CLASSIFICATION: Brown SAND, SP

SAMPLE LOCATION: GP-10, 14'-16'

PROCTOR DATA

Wet Wt + Mold, g	2728.6
Mold Weight, g	1514.2
Wet Weight, g	1214.4
Volume, cf	0.021017
Wet Density,pcf	127.3
1+W	1.203
Dry Density, pcf	105.8

REMOLDED SAMPLE DATA

Sample Type	
Wet Weight, g	
Diameter, in.	4.00
Length, in.	2.89
Sp. Gravity (assumed)	2.70
Void Ratio	0.59

WATER CONTENT DATA

	before	after	
Tare No.	56	2	
Tare Wt, g	0.00	101.30	
Wet-Tare, g	83.77	557.50	
Dry+Tare, g	69.61	474.40	
Water Wt, g	14.2	83.1	
Dry Soil, g	69.6	373.1	
W	20.3	22.3	
Average w	20.3	22.3	

Tested per ASTM D 2634-68

CONSTANT HEAD TEST DATA

Constant Head = 53.5 cm

Test #	ELAPSED TIME (SEC)	Flow, Q (cm ³)	Temp, T (C)
1	71	100.0	20.0
2	71	100.0	20.0
3	71	100.0	20.0
AVE.	71.0	100.0	20.0

Temperature Correction Factor = 1.00000

K ave. = 2.38E-03 cm/sec